

WY02141

204-079

205a(1) UIC - WY20000-02141 - COMPLIANCE,  
WELL # E-30  
Fidr #: 11776

PRIV

402

WY02141





# Inspection Report For Well: WY20000 - 02141

U.S. Environmental Protection Agency  
Underground Injection Control Program, 8ENF-T  
999 18th Street, Suite 300, Denver, CO 80202-2466  
This form was printed on 9/8/2017

INSPECTOR(S): Lead: Wang, Gary Date: 9/12/2017  
Others: Bowling, Linda Time: 9:04 am / pm  
OPERATOR (only if different): NICK HARRIS  
REPRESENTATIVE(S):

PRE-INSPECTION REVIEW	
<b>Marathon Oil Company</b>	
Well Name:	Tribal EI-30 Tensleep
Well Type:	Enhanced Recovery (2R)
Operating Status:	AC (ACTIVE) as of 12/31/2002
Oil Field:	Steamboat Butte
Location:	SWNE S5 T3N R1W
Indian Country:	X, Wind River
Last Inspection:	7/15/2014
Last MIT:	Pass 6/3/2015
Allowable Inj Pressure:	1830 /
Annulus Pressure From Last MIT:	1000

BLACK = POSSIBLE VIOLATION

INSPECTION TYPE: (Select One)  
☐ Construction / Workover  
☐ Plugging  
☐ Post-Closure  
☐ Response to Complaint  
☒ Routine  
☐ Witness MIT

ICIS Entered  
Date 9/25/17  
Initials J3

## OBSERVED VALUES:

EPA 990 - (0-2000)

Tubing Gauge:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Pressure: U: 1060 / L: _____ psig Gauge Range: 0 - 2000 psig	Gauge Owner: <input checked="" type="checkbox"/> EPA <input checked="" type="checkbox"/> Operator
Annulus Gauge:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Pressure: 0 opened psig Gauge Range: 0 - 2000 psig	Gauge Owner: <input type="checkbox"/> EPA <input checked="" type="checkbox"/> Operator
Bradenhead Gauge:	<input type="checkbox"/> Yes <input type="checkbox"/> No	Pressure: _____ psig Gauge Range: _____ psig	Gauge Owner: <input type="checkbox"/> EPA <input type="checkbox"/> Operator
Pump Gauge:	<input type="checkbox"/> Yes <input type="checkbox"/> No	Pressure: _____ psig Gauge Range: _____ psig	Gauge Owner: <input type="checkbox"/> EPA <input type="checkbox"/> Operator
Operating Status: (Select One)	<input checked="" type="checkbox"/> Active <input type="checkbox"/> Being Reworked	<input type="checkbox"/> Not Injecting <input type="checkbox"/> Production	<input checked="" type="checkbox"/> Plugged and Abandoned <input type="checkbox"/> Under Construction

- 1739 BPD  
- 557293 BBL

U2 Entered  
Date 9/20/17  
Initial GW

See page 2 for photos, comments, and site conditions.

TAB	GREEN	BLUE	CBI
		1	

Inspection Report For Well: WY20000 - 02141 (PAGE 2)

PHOTOGRAPHS:

☐ Yes  
☐ No

List of photos taken:

---

---

---

---

Comments and site conditions observed during inspection:

---

---

---

---

---

---

---

---

---

---

GPS: GPS File ID: \_\_\_\_\_

Signature of EPA Inspector(s):

 \_\_\_\_\_

☐ Data Entry

☐ Compliance Staff

☐ Hard Copy Filing





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8

1595 Wynkoop Street  
Denver, CO 80202-1129  
Phone 800-227-8917  
www.epa.gov/region08

NOTICE OF INSPECTION

Date: 9/12/17	Notice of inspection is hereby given according to Section 1445(b) of the Safe Drinking Water Act (42 U.S.C §300f et seq).
Hour: 8:10	

Firm Name: MERIT ENERGY

Firm Address: 27 MAVERICK SPRING RD, KINNEAR, WY 82516


REASON FOR INSPECTION

For the purpose of inspection records, files, papers, processes, controls and facilities, and obtaining samples to determine whether the person subject to an applicable underground injection control program has acted or is acting in compliance with the Safe Drinking Water Act and any applicable condition of permit or rule authorization.

Section 1445(b) of the Safe Drinking Water Act is quoted below:

*Section 1445(b)(1): Except as provided in Paragraph (2)[of this section of the SDWA], the Administrator, or representatives of the Administrator duly designated by him, upon presenting appropriate credentials, and a written notice to any supplier of water or other person subject to (A) a national primary drinking water regulation prescribed under section 300g-1 of this title, (B) an applicable underground injection control program, or (C) any requirement to monitor an unregulated contaminant pursuant to subsection (a) of this section, or person in charge of any of the property of such supplier or other person referred to in clause (A), (B), or (C), is authorized to enter any establishment, facility, or other property of such supplier or other person in order to determine whether such supplier or other person has acted or is acting in compliance with this subchapter, including for this purpose, inspection, at reasonable times, of records, files, papers, processes, controls, and facilities, or in order to test any feature of a public water system, including its raw water source. The Administrator or the Comptroller General (or any representative designated by either) shall have access for the purpose of audit and examination to any records, reports, or information of a grantee which are required to be maintained under subsection (a) of this section or which are pertinent to any financial assistance under this subchapter.*

LIANG LARRY J WANG  
Inspector's Name & Title (Print)

  
Inspector's Signature



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VIII

999 18th STREET - SUITE 500  
DENVER, COLORADO 80202-2466

AUG 12 1997

Ref: 8ENF-T

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Mr. Eugene M. Grant  
Regulatory Coordinator  
Rocky Mountain Region  
Marathon Oil Company  
1501 Stampede Avenue  
Cody, WY 82414-4721

Re: UNDERGROUND INJECTION CONTROL (UIC)  
Allowable Maximum Injection Pressures  
Steamboat Butte Field  
Fremont County, WY

Dear Mr. Grant:

This letter is being sent as a reminder of the current allowable surface injection pressures for Marathon's injection wells in the Steamboat Butte Field on the Wind River Indian Reservation in Wyoming. The allowable injection pressures are shown below:

<u>Well Name</u>	<u>EPA Number</u>	<u>Allowable Pressure</u>
<u>Nugget Injector</u>		
Tribal CI-24	WY2621-02137	1033 psig
Tribal CI-1	WY2000-02145	1360 psig
Tribal EI-14	WY2000-02131	1400 psig
<u>Phosphoria Injector</u>		
Brinkerhoff #6	WY2000-02134	2255 psig
Tribal CI-22	WY2000-02142	2200 psig
Tribal CI-23	WY2000-02139	2300 psig
Tribal EI-26	WY2000-02129	2190 psig
<u>Tensleep Injector</u>		
Brinkerhoff #4	WY2000-02133	1835 psig
Tribal CI-27	WY2000-02146	1875 psig
Tribal CI-15	WY2000-02140	1825 psig
Tribal CI-30X	WY2000-02143	1865 psig
Tribal CI-31	WY2000-02138	1900 psig
Tribal EI-30	WY2000-02141	1860 psig
Tribal S-1	WY2000-02130	1805 psig





The pressure limits shown above were calculated using formation fracture gradients of 0.70 psi/ft for the Nugget (except well CI-24 which was permitted using a gradient of 0.638); 0.77 psi/ft for the Phosphoria; and 0.70 psi/ft for the Tensleep. These gradients were obtained from a step rate test of the Nugget; and fracture stimulation treatments of the Phosphoria and Tensleep performed in three separate wells during 1989-1991 by the previous operator of the field, Chevron USA. Maximum pressures were calculated using the formula shown below:

$$P_m = [FG - 0.433 (SG)] d$$

Where:  $P_m$  = maximum surface injection pressure at wellhead (psig)  
 $FG$  = fracture gradient (psi/ft)  
 $SG$  = specific gravity of injected fluid (1.004)  
 $d$  = depth to top of injection perforations

These injection pressures are recorded in our computer data base and will be available for use during field inspections in order to verify that allowable injection pressures are not being exceeded, and for comparison with maximum pressures recorded on Annual Monitoring Reports. If you require a higher injection pressure for continued operation of a well(s), you may conduct a step-rate test of the injection zone and request an increase based on the test results. However, this test may, or may not, indicate that a higher injection pressure can be approved for the well(s).

If you have any questions concerning this letter, or do not agree with the listed pressure limits, you may contact John Carson at (303) 312-6203. Also, please direct all correspondence to the attention of John Carson at Mail Code 8ENF-T.

Sincerely,



Sharon L. Kercher, Director  
 Technical Enforcement Program

cc: Mr. Stuart Cerovski  
 Bureau of Land Management  
 Lander resource Area  
 P.O. Box 589  
 Lander, WY 82520-0589

## Marathon (Chevron) - Steamboat Butte

Tribal C-32 (WY2611-03564) (Permitted well, Now PR)

Pentfs: 6744-6750 - Tensleep Never Converted

Max Press: 2007 psi Used F.G. 0.698 psi/ft from frac. treatment

VIC Max: Not in VIC - Well never converted of nearby well

CI-24 (WY2621-02137) (Permitted Well)

✓ Pentfs: 5298-5350 Nugget & 6543-658(?) Phosphoric(?)

Max Press: 1033 psi Using F.G. 0.638 from SRT on this well on

VIC Max 1033 psi Nugget on 3/4/91

Inj. 0

? ~~make 1080 psi~~

○ Brinkerhoff #4 (WY2000-02133)

Pentfs: 6904-6996 - Tensleep

Max Press: 2900 psi (Inventory by operator) Chevron

VIC Max: 1787 psi

Inj. 0

\* Brinkerhoff #6 (WY2000-02134)

Pentfs: 6709-6747 - Phosphoric

Max Press: 2900 psi (Inventory by operator)

VIC Max: 2267 psi

Inj. 0

2254 psi w/ 0.77 & 0.434

2261 psi w/ 0.77 & 0.433

Tribal C-1 (WY2000-02115)

✓ Pentfs 5118-5255 - Nugget

Max Press: 1170 psi (Inventory by operator)

VIC Max: 1369 psi

Inj. 2

1044 psi w/ 0.638 & 1361 psi w/ 0.70



Tribal CI-15 (WY 2000-02140)

Perfs: <sup>6868</sup>6868-7038 - Tensleep  
Max Press <sup>6929?</sup>1860 psi (Inventory by Operator)  
VIC Max 1853 psi  
Inj. 0

\* Tribal CI-22 (WY 2000-02142)

Perfs 6544-6588 - Phosphoria  
Max Press 2000 psi (Inventory by Operator)  
VIC Max 2208 psi Well is PB @ 1530'; Marston  
Inj. 0 2199 w/0.77 will complete well in Frontier  
on P&A

\* Tribal CI-23 (WY 2000-02139)

Perfs: 6836-6882 - Phosphoria  
Max Press 2100 psi (Inventory by Operator)  
VIC Max 2306 psi  
Inj. 0

Tribal CI-27 (WY 2621-02146)

Perfs: 7056-7182 - Tensleep  
Max Press: 1990 psi (Inventory by Operator)  
VIC Max 1887 psi  
Inj. 0

Tribal CI-30X (WY 2000-02143)

Perfs: 7004-7202 - Tensleep  
Max Press 2260 (Inventory by Operator)  
VIC Max: 1873 psi  
Inj. 0

③

Tribal CI-31 (WY 2000-02138)

Pentfs: 7144-7284 - Tensleep To WO & Pent up to 7036'

Max Press: 2100 psi (Inventory by Operator)

VIC Max 1910 psi

Inj. 0

Tribal EI-14 (WY 2000-02131)

Pentfs: 5260-5340 - Nugget

Max Press: 2680 psi (Inventory by Operator)

VIC Max 1407 psi

Inj. 0

1404 psi w/0.70 x 0.433

1399 psi w/0.70 x 0.434

\* Tribal EI-26 (WY 2000-02129)

Pentfs: 6520-6564 - Phosphoria

Max Press 1800 psi (Inventory by Operator)

VIC Max: 2200 psi

Inj. 0

Tribal EI-30 (WY 2000-02141)

Pentfs 6991-7148 - Tensleep

Max Press 1700 psi (Inventory by Operator)

VIC Max 1869 psi

Inj. 0

Tribal S-1 (WY 2000-02130)

Pentfs: 6986-6950 - Tensleep

Max Press 1750 psi (Inventory by Operator)

VIC Max 1856 psi

Inj. 0





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VIII

999 18th STREET - SUITE 500  
DENVER, COLORADO 80202-2466

AUG 12 1997

Ref: 8ENF-T

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Mr. Eugene M. Grant  
Regulatory Coordinator  
Rocky Mountain Region  
Marathon Oil Company  
1501 Stampede Avenue  
Cody, WY 82414-4721

Re: UNDERGROUND INJECTION CONTROL (UIC)  
Allowable Maximum Injection Pressures  
Steamboat Butte Field  
Fremont County, WY

Dear Mr. Grant:

This letter is being sent as a reminder of the current allowable surface injection pressures for Marathon's injection wells in the Steamboat Butte Field on the Wind River Indian Reservation in Wyoming. The allowable injection pressures are shown below:

<u>Well Name</u>	<u>EPA Number</u>	<u>Allowable Pressure</u>
<u>Nugget Injector</u>		
Tribal CI-24	WY2621-02137	1033 psig
Tribal CI-1	WY2000-02145	1360 psig
Tribal EI-14	WY2000-02131	1400 psig
<u>Phosphoria Injector</u>		
Brinkerhoff #6	WY2000-02134	2255 psig
Tribal CI-22	WY2000-02142	2200 psig
Tribal CI-23	WY2000-02139	2300 psig
Tribal EI-26	WY2000-02129	2190 psig
<u>Tensleep Injector</u>		
Brinkerhoff #4	WY2000-02133	1835 psig
Tribal CI-27	WY2000-02146	1875 psig
Tribal CI-15	WY2000-02140	1825 psig
Tribal CI-30X	WY2000-02143	1865 psig
Tribal CI-31	WY2000-02138	1900 psig
Tribal EI-30	WY2000-02141	1860 psig
Tribal S-1	WY2000-02130	1805 psig



Printed on Recycled Paper

The pressure limits shown above were calculated using formation fracture gradients of 0.70 psi/ft for the Nugget (except well CI-24 which was permitted using a gradient of 0.638); 0.77 psi/ft for the Phosphoria; and 0.70 psi/ft for the Tensleep. These gradients were obtained from a step rate test of the Nugget; and fracture stimulation treatments of the Phosphoria and Tensleep performed in three separate wells during 1989-1991 by the previous operator of the field, Chevron USA. Maximum pressures were calculated using the formula shown below:

$$P_m = [FG - 0.433 (SG)] d$$

Where:  $P_m$  = maximum surface injection pressure at wellhead (psig)  
 FG = fracture gradient (psi/ft)  
 SG = specific gravity of injected fluid (1.004)  
 d = depth to top of injection perforations

These injection pressures are recorded in our computer data base and will be available for use during field inspections in order to verify that allowable injection pressures are not being exceeded, and for comparison with maximum pressures recorded on Annual Monitoring Reports. If you require a higher injection pressure for continued operation of a well(s), you may conduct a step-rate test of the injection zone and request an increase based on the test results. However, this test may, or may not, indicate that a higher injection pressure can be approved for the well(s).

If you have any questions concerning this letter, or do not agree with the listed pressure limits, you may contact John Carson at (303) 312-6203. Also, please direct all correspondence to the attention of John Carson at Mail Code 8ENF-T.

Sincerely,



Sharon L. Kercher, Director  
 Technical Enforcement Program

cc: Mr. Stuart Cerovski  
 Bureau of Land Management  
 Lander resource Area  
 P.O. Box 589  
 Lander, WY 82520-0589



Ref: 8ENF-T

AUG - 12 1997

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Mr. Eugene M. Grant  
Regulatory Coordinator  
Rocky Mountain Region  
Marathon Oil Company  
1501 Stampede Avenue  
Cody, WY 82414-4721

Re: UNDERGROUND INJECTION CONTROL (UIC)  
Allowable Maximum Injection Pressures  
Steamboat Butte Field  
Fremont County, WY

Dear Mr. Grant:

This letter is being sent as a reminder of the current allowable surface injection pressures for Marathon's injection wells in the Steamboat Butte Field on the Wind River Indian Reservation in Wyoming. The allowable injection pressures are shown below:

<u>Well Name</u>	<u>EPA Number</u>	<u>Allowable Pressure</u>
<u>Nugget Injector</u>		
Tribal CI-24	WY2621-02137	1033 psig
Tribal CI-1	WY2000-02145	1360 psig
Tribal EI-14	WY2000-02131	1400 psig
<u>Phosphoria Injector</u>		
Brinkerhoff #6	WY2000-02134	2255 psig
Tribal CI-22	WY2000-02142	2200 psig
Tribal CI-23	WY2000-02139	2300 psig
Tribal EI-26	WY2000-02129	2190 psig
<u>Tensleep Injector</u>		
Brinkerhoff #4	WY2000-02133	1835 psig
Tribal CI-27	WY2000-02146	1875 psig
Tribal CI-15	WY2000-02140	1825 psig
Tribal CI-30X	WY2000-02143	1865 psig
Tribal CI-31	WY2000-02138	1900 psig
Tribal EI-30	WY2000-02141	1860 psig
Tribal S-1	WY2000-02130	1805 psig

8ENF-T  
JBY  
7/10/97

PS Form 3800, April 1995

Sent to	Street & Number	Post Office, State	Postage	Certified Fee	Special Delivery	Restricted Delivery	Return Receipt Whom & Date	Return Receipt Date & Address	TOTAL Postage	Postmark or 1
<p><b>MR EUGENE M GRANT</b>  <b>REGULATORY COORDINATOR</b>  <b>ROCKY MOUNTAIN REGION</b>  <b>MARATHON OIL COMPANY</b>  <b>1501 STAMPEDE AVENUE</b>  <b>CODY WY 82414-4721</b></p>										

P 105 212 660

**US Postal Service**  
**Receipt for Certified Mail**

No Insurance Coverage Provided.  
Do not use for International Mail (See reverse)

<p><b>SENDER:</b></p> <ul style="list-style-type: none"> <li>Complete items 1 and/or 2 for additional services.</li> <li>Complete items 3, 4b, and 4c.</li> <li>Print your name and address on the reverse of this form so that we can return this card to you.</li> <li>Attach this form to the front of the mailpiece, or on the back if space does not permit.</li> <li>Write "Return Receipt Requested" on the mailpiece below the article number.</li> <li>The Return Receipt will show to whom the article was delivered and the date delivered.</li> </ul>		<p>I also wish to receive the following services (for an extra fee):</p> <p>1. <input type="checkbox"/> Addressee's Address</p> <p>2. <input type="checkbox"/> Restricted Delivery</p> <p>Consult postmaster for fee.</p>	
<p>3. <b>MR EUGENE M GRANT</b>  <b>REGULATORY COORDINATOR</b>  <b>ROCKY MOUNTAIN REGION</b>  <b>MARATHON OIL COMPANY</b>  <b>1501 STAMPEDE AVENUE</b>  <b>CODY WY 82414-4721</b></p>		<p>4a. Article Number  P 105 212 660</p>	
<p>5. Received By: (Print Name)</p>		<p>4b. Service Type</p> <p><input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified</p> <p><input type="checkbox"/> Express Mail <input type="checkbox"/> Insured</p> <p><input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> COD</p>	
<p>6. Signature (Addressee or Agent)</p> <p>X <i>[Signature]</i></p>		<p>7. Date of Delivery</p>	
<p>8. Addressee's Address (Only if requested and fee is paid)</p>		<p>Thank you for using Return Receipt Service.</p>	

PS Form 3811, December 1994

Domestic Return Receipt

95

Late MIT?

J

**Inspection Report for Well WY2000-02141**

UNDERGROUND INJECTION CONTROL PROGRAM: Region VIII DIRECT IMPLEMENTATION

This form was printed on 05/16/1997.

INSPECTOR(S): Carol Bowden & Barbara Conklin Date 5/22/97 Time 4:55 am/pmOPERATOR Marathon Oil Co REPRESENTATIVE Chuck**Marathon Oil Company, Cody, WY**

EI-30

STEAMBOAT BUTTE

Op ID MAR04

AC 2R ~~TA~~ as of 01/01/1995

05 03N 01W

Indian? Yes, Wind River

Compliance staff: CARSON

**PRE-INSPECTION REVIEW**

Last inspection: 05/22/1995

Last MIT: Passed **10/21/1993**

	Inj Pressure
Reported	0
Allowable	1869

97-TA-98  
12/94 CB  
Need 96

Wellhead equipment \_\_\_\_\_

INSPECTION TYPE ☒ Routine ☐ PA ☐ Compliance ☐ Construction  
☐ Workover ☐ Enforcement ☐ Response to emergency or complaint ☐ Other

**OBSERVED VALUES**

Inj Pressure at wellhead 1700 psig Gauge range 0-3000 (20) psig  
 Inj Pressure at pump \_\_\_\_\_ psig Gauge range \_\_\_\_\_ psig  
 Annulus Pressure 0 psig Gauge range (0-3000) (20) psig  
 Pressure Gauge Present ☒ Yes ☐ No

Injection Rate 1073.2 BWPD Cumulative Volume 24057  
 Flow Meter Present ☒ Yes ☐ No Located at ☒ WELL ☐ PUMP  
 Meter Type Halliburton mc-IF

☐ Non-resettable ☒ Resettable ☐ Rate Indicator ☐ Other

Operating Status ☒ Active ☐ TA ☐ PA ☐ Shut in ☐ Under Construction

PHOTOGRAPHS? ☒ Yes ☐ No How the negatives are numbered: \_\_\_\_\_

# 13414**REVIEWED**BY: JACDATE: 7/23/97*See back of page for comments, site conditions, and compliance followup.*



## UIC Inspection

Comments and site conditions observed during inspection: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Signature of EPA Inspector(s) Carol Ann Bowden + Barbara Conkle

### OFFICE USE ONLY - COMPLIANCE FOLLOWUP

Observed Inj Pressure/Rate/Volume Within Allowed Limits Yes ☐ No ☐

Acceptable fittings at site Yes ☐ No ☐

Transfer of ownership? ☐ Yes ☐ No OLD \_\_\_\_\_ NEW \_\_\_\_\_

Change in operating status (computer update) ☐ Yes \_\_\_\_\_ ☐ No

Possible violation ☐ Yes ☐ No - Followup Initiated ☐ Yes ☐ No

☐ Data Entry

☐ Compliance Staff

☐ 2nd Data Entry

☐ Hard Copy Filing

ENFORCEMENT CONFIDENTIAL

Compliance Status for Well WY2000-02141 05/16/1997

UNDERGROUND INJECTION CONTROL PROGRAM: Region VIII DIRECT IMPLEMENTATION

Marathon Oil Company, Cody, WY

EI-30

STEAMBOAT BUTTE

Op ID MAR04

2R TA as of 01/01/1995

05 03N 01W

Indian? Yes, Wind River

Compliance staff: CARSON

Comment: Purchased from Chevron

Type of Authorization: Rule authorized on promulgation date 11/25/88

LAST INSPECTION

05/22/1995

Type of inspection: Routine

Possible violations identified? No

Operator during insp \*CVR02\*

LAST MIT

Passed 10/21/1993

EPA witnessed? No

Operator during MIT \*CVR04\*

Next required MIT: 12/31/1996

MONITORING REPORTS

1996 report due 02/15/1997  
received 02/27/1997

OPERATING CONDITIONS

Inj Pressure

Reported 0

Allowable 1869

FINANCIAL RESPONSIBILITY: \*CVR02FS6\*

Established by , ,

Type of Demonstration: Financial Statement Amount \*\$0.00\*

If Financial Statement, date next is due: \* / / \*

Comment: \* \*

Does the compliance action tracking system show any currently unresolved violations for WY02141? NO.

Does the inventory database show this well as the target of an enforcement action? NO.

LEGEND:

■ This mark sets off the values involved in a strong discrepancy:  
operator violation or database error.

There are 4 such values.

\* This mark sets off something for the user (EPA) to notice, such as  
a field from a missing record or a due date within 90 days.

There are 6 such values.

ENFORCEMENT CONFIDENTIAL

Compliance Status for Well WY2000-02141 05/16/1997

UNDERGROUND INJECTION CONTROL PROGRAM: Region VIII DIRECT IMPLEMENTATION

**Marathon Oil Company, Cody, WY**

EI-30

STEAMBOAT BUTTE

Op ID MAR04

2R TA as of 01/01/1995

05 03N 01W

Indian? Yes, Wind River

Compliance staff: CARSON

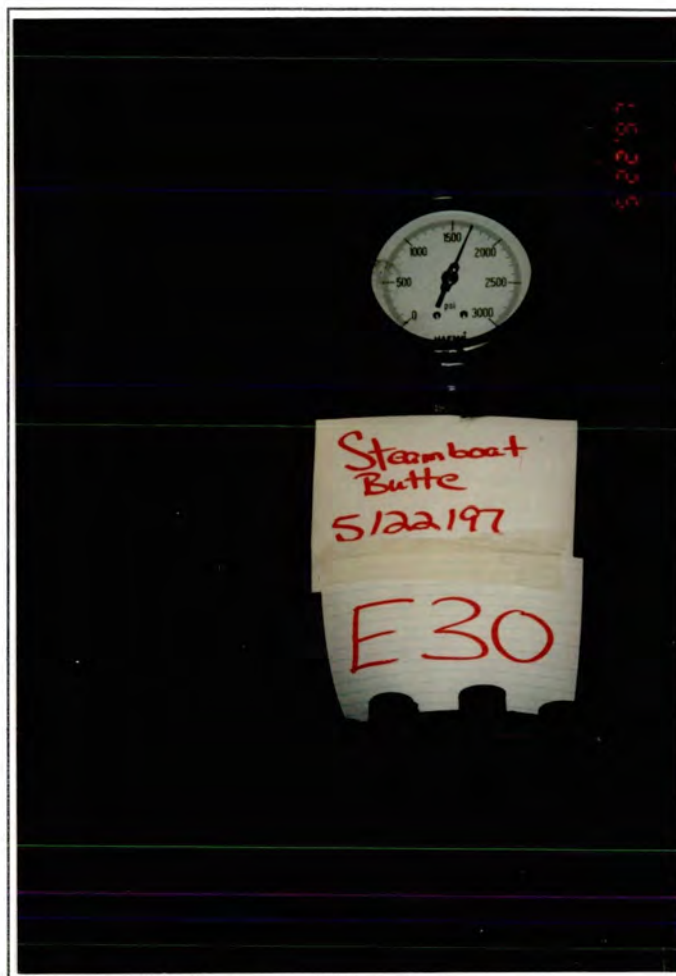
Comment: Purchased from Chevron

**MESSAGES DESCRIBING VIOLATIONS OR WARNING CONDITIONS:**

- v[2] The next MIT is overdue.
- v[7] The monitoring report was received late.
- w[2] The FRID is for a different operator than OPID.
- w[4] The latest inspection was for other than the current operator.
- w[10] The latest MIT was for other than the current operator.
- w[12] The FRID in WELLS123 doesn't appear in FRFILE.



**Official Photograph  
U.S. Environmental Protection Agency  
Region VIII**



EPA ID Number:	WY2000-02141				
Well Name:	EI-30				
Location:	05 03N 01W      Wind River				
Field:	Steamboat Butte	County:		State:	WY
Photo Date:	05/22/97	Time:	4:55 p.m.	Negative Number:	13
Weather:	(Sun)      (Haze)      (Cloudy)      (Rain)      (Snow)				
Photographer:	Barbara Conklin				
Witness:	Carol Bowden				
Camera:	Minolta	Film Type:	Kodak	ASA:	100
Processed By:	Foto Fast	Negative Location:	Binder for Negatives by Compliance Files		

Official Photograph  
U.S. Environmental Protection Agency  
Region VIII



EPA ID Number:	WY2000-02141							
Well Name:	EI-30							
Location:	05 03N 01W      Wind River							
Field:	Steamboat Butte			County:			State:	WY
Photo Date:	05/22/97		Time:	4:55 p.m.		Negative Number:	14	
Weather:	(Sun)      (Haze)      (Cloudy)      (Rain)      (Snow)							
Photographer:	Barbara Conklin							
Witness:	Carol Bowden							
Camera:	Minolta			Film Type:	Kodak		ASA:	100
Processed By:	Foto Fast	Negative Location:		Binder for Negatives by Compliance Files				

**Inspection Report for Well WY2000-02141**  
UNDERGROUND INJECTION CONTROL PROGRAM: Region VIII DIRECT IMPLEMENTATION  
This form was printed on 05/11/1995.

INSPECTOR(S): Chuck Williams & Douglas Minter Date 05/22/95 Time 3:17 am/pm

OPERATOR Chevron REPRESENTATIVE Chuck Henry

<b>Chevron Production Company, Evanston, WY</b>		ID CVR02
EI-30	2R AC as of	/ /
STEAMBOAT BUTTE	05 03N 01W	
Indian? Yes, WIND RIVER	Compliance staff: CARSON	

**PRE-INSPECTION REVIEW**

Last inspection: 08/11/1994 Last MIT: Passed 10/21/1993

	Inj Pressure
Reported	<u>2000</u>
Allowable	<u>1869</u>

Wellhead equipment S.I.

INSPECTION TYPE ☒ Routine ☐ PA ☐ Compliance ☐ Construction  
☐ Workover ☐ Enforcement ☐ Response to emergency or complaint ☐ Other

**OBSERVED VALUES**

Inj Pressure at wellhead 0 psig Gauge range 0-3000 psig  
Inj Pressure at pump \_\_\_\_\_ psig Gauge range \_\_\_\_\_ psig  
Annulus Pressure 0 psig Gauge range 0-2000 psig  
Pressure Gauge Present ☒ Yes ☐ No

Injection Rate \_\_\_\_\_ BWPD Cumulative Volume \_\_\_\_\_  
Flow Meter Present ☐ Yes ☒ No Located at ☐ WELL ☐ PUMP  
Meter Type \_\_\_\_\_  
☐ Non-resettable ☐ Resettable ☐ Rate Indicator ☐ Other

Operating Status ☐ Active ☐ TA ☐ PA ☒ Shut in ☐ Under Construction

PHOTOGRAPHS? ☐ Yes ☒ No How the negatives are numbered: \_\_\_\_\_

**REVIEWED**

BY: [Signature]  
DATE: 6/28/95

*See back of page for comments, site conditions, and compliance followup.*

## UIC Inspection

Comments and site conditions observed during inspection:\_\_\_\_\_

Signature of EPA Inspector(s)

Chuck Williams & Douglas R. Fritter

## OFFICE USE ONLY - COMPLIANCE FOLLOWUP

Observed Inj Pressure/Rate/Volume Within Allowed Limits Yes [ ] No

Acceptable fittings at site	Yes	[ ]	No
-----------------------------	-----	-----	----

Transfer of ownership?    ☐ Yes    ☐ No    OLD \_\_\_\_\_ NEW \_\_\_\_\_

Change in operating status (computer update)    ☐ Yes \_\_\_\_\_ ☐ No

Possible violation    ☐ Yes    ☐ No    -    Followup Initiated    ☐ Yes    ☐ No

Staff initials (CARSON)                      Date

[ ] Data Entry

☐ Compliance Staff

[ ] 2nd Data Entry

☐ Hard Copy Filing





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VIII

999 18th STREET - SUITE 500  
DENVER, COLORADO 80202-2466

JUL 18 1995

Ref: 8WM-DW

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

To Injection Well Operators

RE: UNDERGROUND INJECTION CONTROL (UIC)  
Notice of Noncompliance  
Excess Injection Pressure

Dear Operator:

The Annual Disposal/Injection Well Monitoring Reports (EPA Form 7520-11) submitted by your office for the year 1994, indicate that the wells shown on the enclosed list were injecting at pressures in excess of their allowable maximum surface injection pressures. The list also indicates the highest reported pressures during the year and allowable pressures. Operation of an injection well at pressures greater than authorized is a violation of the Safe Drinking Water Act and may result in enforcement action. Therefore, you are directed to maintain the injection pressures of these wells at or below their maximum allowable limits.

Within thirty (30) days of receipt of this letter, please respond in writing describing: 1) what action has been taken to correct this situation; 2) how you intend to prevent any recurrence in the future; or 3) why the pressure information is in error. If you believe a higher injection pressure is needed for continued operation of a well, you may conduct a step-rate injectivity test of the injection zone and request an increase based on the test results. However, this test may, or may not, indicate that a higher injection pressure can be approved for the well.

If you have any questions concerning this letter, you may contact John Carson at (303) 293-1435. Also, please direct all correspondence to the attention of John Carson at Mail Code 8WM-DW.

Sincerely,

Thomas J. Pike  
Chief

UIC Implementation Section

Enclosure: List of Wells and Pressures



Printed on Recycled Paper

OPERATORS THAT EXCEEDED THEIR MAXIMUM INJECTION PRESSURE

Wells Operated by: Chevron U.S.A., Inc.

WELLID	WELLNAME	FIELDNAME	TYPE	STATUS	REPORTED PRESSURE	ALLOWABLE PRESSURE
UT02394	WVU FED #31	WONSITS VALLEY	2R	AC	1780	1613
UT02395	RW #11 (34-27B)	RED WASH	2R	AC	1850	1797
U 396	RW #14 (14-13B)	RED WASH	2R	AC	1830	1751
U 398	RW #34 (23-14B)	RED WASH	2R	AC	1800	1730
UT02400	RW #56 (41-28B)	RED WASH	2R	AC	1850	1650
UT02407	RW #148 (13-22B)	RED WASH	2R	AC	1950	1892
UT02409	RWU #156 (23-15B)	RED WASH	2R	AC	1700	1565
UT02416	RW #2 (14-24B)	RED WASH	2R	AC	1800	1767
UT02417	RW #7 (41-27B)	RED WASH	2R	AC	2050	1811
UT02420	RW #25 (23-23B)	RED WASH	2R	AC	1825	1652
UT02421	RW #59 (12-24B)	RED WASH	2R	AC	1830	1808
UT02421	RW #59 (12-24B)	RED WASH	2R	AC	1850	1808
UT02423	RW #91 (33-22B)	RED WASH	2R	AC	1850	1849
UT02424	RW #93 (43-27B)	RED WASH	2R	AC	2200	1783
UT02455	RW #275 (31-26B)	RED WASH	2R	AC	1850	1767
UT02455	RW #275 (31-26B)	RED WASH	2R	AC	1850	1767
UT02469	WVU FED #16	WONSITS VALLEY	2R	AC	1950	1613
UT02471	WVU STA #21	WONSITS VALLEY	2R	AC	1815	1647
UT02479	WVU #36	WONSITS VALLEY	2R	AC	1860	1660
U 483	WVU FED #41	WONSITS VALLEY	2R	AC	1830	1620
UT02497	WVU #67	WONSITS VALLEY	2R	AC	1780	1586
UT02498	WVU #68	WONSITS VALLEY	2R	AC	1800	1584
UT02501	WVU STA #72	WONSITS VALLEY	2R	AC	1950	1894
UT02502	WVU STATE #73	WONSITS VALLEY	2R	AC	1800	1598
UT02504	WVU FED #78	WONSITS VALLEY	2R	AC	1940	1647
UT02509	WVU 126	WONSITS VALLEY	2R	AC	1920	1616
UT02510	WVU FED #28-2	WONSITS VALLEY	2R	AC	1850	1816
UT02714	WVU FED #3-21-1D	GYPSUM HILLS	2R	AC	1900	1322
UT02715	SRU #8-I	GYPSUM HILLS	2R	AC	1890	1327
UT03098	WVU FED #66	WONSITS VALLEY	2R	AC	1800	1500
UT03721	10	GYPSUM HILLS	2R	AC	1790	1341
UT03722	COSTAS FEDERAL 2-20-	GYPSUM HILLS	2R	AC	1800	1359
UT03777	WVU #71-2	WONSITS VALLEY	2R	AC	1960	1873

OPERATORS THAT EXCEEDED THEIR MAXIMUM INJECTION PRESSURE

Wells Operated by: Chevron Production Company

WELLID	WELLNAME	FIELDNAME	TYPE	STATUS	REPORTED PRESSURE	ALLOWABLE PRESSURE
WY02130	S-1	STEAMBOAT BUTTE	2R	TA	1900	1856
WY02140	CI-15	STEAMBOAT BUTTE	2R	TA	1960	1853
WY02141	EI-30	STEAMBOAT BUTTE	2R	TA	2000	1869
WY02143	CI-30X	STEAMBOAT BUTTE	2R	TA	1980	1873
WY02146	CI-27	STEAMBOAT BUTTE	2R	TA	2000	1887



# Inspection Report for Well WY2000-02141

UNDERGROUND INJECTION CONTROL PROGRAM: Region VIII DIRECT IMPLEMENTATION

This form was printed on 07/29/94.

INSPECTOR(S): CHUCK WILLIAMS EMMETT SCHMITZ Date 08/11/94 Time 10:50 am/pm

OPERATOR Chevron REPRESENTATIVE \_\_\_\_\_

<b>Chevron Production Company, Evanston, WY</b>	Op ID CVR02
EI-30	2R AC as of / /
STEAMBOAT BUTTE	05 03N 01W
Indian? Yes, WIND RIVER	Compliance staff: WILLIAMS

## PRE-INSPECTION REVIEW

Last inspection: 09/30/93 Last MIT: Passed 10/21/93

	Inj Pressure
Reported	<u>2000</u>
Allowable	<u>1869</u> ✓

Wellhead equipment Shed

INSPECTION TYPE ☒ Routine ☐ PA ☐ Compliance ☐ Construction  
☐ Workover ☐ Enforcement ☐ Response to emergency or complaint ☐ Other

## OBSERVED VALUES

Inj Pressure at wellhead 1550 ✓ psig Gauge range 0-5000 psig  
Inj Pressure at pump \_\_\_\_\_ psig Gauge range \_\_\_\_\_ psig  
Annulus Pressure 0 psig Gauge range 0-3000 psig  
Pressure Gauge Present ☒ Yes ☐ No

Injection Rate 761 BWPD Cumulative Volume 7606  
Flow Meter Present ☒ Yes ☐ No Located at ☒ WELL ☐ PUMP  
Meter Type Halliburton mc-II  
☐ Non-resettable ☒ Resettable ☐ Rate Indicator ☐ Other

Operating Status ☒ Active ☐ TA ☐ PA ☐ Shut in ☐ Under Construction

PHOTOGRAPHS? ☐ Yes ☒ No How the negatives are numbered: \_\_\_\_\_

See back of page for comments, site conditions, and compliance followup.

## UIC Inspection

Comments and site conditions observed during inspection: \_\_\_\_\_

Signature of EPA Inspector(s) \_\_\_\_\_

*CE Williams*

### OFFICE USE ONLY - COMPLIANCE FOLLOWUP

Observed Inj Pressure/Rate/Volume Within Allowed Limits ☒ Yes ☐ No  
Acceptable fittings at site ☒ Yes ☐ No

Transfer of ownership? ☐ Yes ☒ No OLD \_\_\_\_\_ NEW \_\_\_\_\_

Change in operating status (computer update) ☐ Yes ☒ No

Possible violation ☐ Yes ☒ No - Followup Initiated ☐ Yes ☒ No

Staff initials (WILLIAMS) \_\_\_\_\_

*CEW.*

Date

*8/16/94*

☐ Data Entry

☒ Compliance Staff

☐ 2nd Data Entry

☐ Hard Copy Filing



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VIII

999 18th STREET - SUITE 500  
DENVER, COLORADO 80202-2466

JUN 28 1994

WYD 2141

Ref: 8WM-DW

CERTIFIED MAIL  
RETURN RECEIPT REQUESTEDMr. Larry Leitzke  
Chevron U.S.A. Production Company  
P.O. Box 6004  
Evanston, WY 82931RE: UNDERGROUND INJECTION CONTROL (UIC)  
Fracture Gradient - Rule Authorized  
Class II Injection Wells  
Steamboat Butte Field  
Wind River Indian Reservation  
Fremont County, Wyoming

Dear Mr. Leitzke:

The Environmental Protection Agency (EPA) has recently established an acceptable sand-face fracture gradient for the above referenced field. The proposed sand-face fracture gradients and the maximum surface injection pressure (Pm) formula hereby set forth were developed from the review of data provided by Chevron. They will be used to calculate maximum injection pressures for all rule authorized wells in the referenced field in accordance with 40 CFR § 144.28 (f) (3) (ii).

The data provided by Chevron was from Step-Rate tests and ISIP information for the three (3) producing zones (Nugget, Phosphoria and Tensleep formations) in the Steamboat Butte Field. Based on the data submitted, the following fracture gradients were estimated:

TABLE 1


FORMATION	ISIP	FRACTURE GRADIENT	SOURCE OF EST.
Nugget	-	0.638	Step-Rate Test Permitted Well
Nugget	1473	0.70	ISIP after SRT
Phosphoria	2100	0.77	ISIP
Tensleep	1800	0.70	ISIP



These values shall then apply to all Class II injection wells in the field. Until additional information is provided justifying a high fracture for the fourteen (14) injection wells, the maximum allowable surface injection pressure (Pm), based on the above gradients, will be initiated and enforced, see Table 2 enclosure.

Should you have any questions regarding this action, please give Chuck Williams a call at (303) 293-1550. Thank you for your continued cooperation.

Sincerely

  
Thomas J. Pike  
Chief

UIC Implementation Section

Enclosure

cc: Shoshone and Arapaho Tribes  
Joint Business Council  
P. O. Box 217  
Fort Washakie, WY 82514

Mr. Stuart Cerovski  
BLM - Lander Reserve Area  
P. O. Box 589  
Lander, WY 82502



# CHEVRON U.S.A. PRODUCTION COMPANY

## MAXIMUM INJECTION PRESSURE

STEAMBOAT BUTTE FIELD  
WIND RIVER INDIAN RESERVATION  
FREMONT COUNTY, WYOMING

TABLE 2

CHEVRON WELL NO.	EPA WELL ID. NO.	CALC MAX INJ PRESS (Pm)	DEPTH TO INJ ZONE (ft)	FRACTURE GRAD (psi/ft)	SP. GR.	STATUS
NUGGET FORMATION						
CI-24	WY02137	1033	5298	.638	.999	SI
CI-1	WY02145	1369	5118	.70	.999	AC
EI-14	WY02131	1407	5260	.70	.999	SI
PHOSPHORIA FORMATION						
BRINK-6	WY02134	2264	6709	.77	.999	SI
CI-23	WY02139	2239	6636	.77	.999	AC
CI-22	WY02142	2208	6544	.77	.999	AC
EI-26	WY2129	2200	6520	.77	.999	AC
TENSLEEP FORMATION						
BRINK-4	WY02133	1846	6904	.70	.999	SI
CI-31	WY02138	1910	7144	.70	.999	AC
CI-15	WY02140	1837	6868	.70	.999	AC
EI-30	WY02141	1869	6991	.70	.999	AC
CI-30X	WY02143	1873	7004	.70	.999	AC
CI-27	WY02146	1887	7056	.70	.999	AC
S-1	WY02130	1815	6786	.70	.999	AC

$$P_m = [FG - 0.433 (SG)] d$$

Where:  $P_m$  = maximum surface injection pressure at wellhead - pounds per square inch gauge (psig)  
 $SG$  = specific gravity of injected fluid - water analysis  
 $d$  = depth to top of injection perforations

**Inspection Report for Well WY2000-02141**  
**UNDERGROUND INJECTION CONTROL PROGRAM: Region VIII DIRECT IMPLEMENTATION**  
This form was printed on 09/22/93.

INSPECTOR(S): CHUCK WILLIAMS & EMMETT SCHMITZ Date 09/30/93 Time 1:19 am/pm

OPERATOR Chevron REPRESENTATIVE Chuck Henry

<b>Chevron Production Company, Evanston, WY</b> E-30 STEAMBOAT BUTTE  Indian? Yes, WIND RIVER	ID CVR02 2R AC as of / / 05 03N 01W  Compliance staff: WILLIAMS
---	---

**PRE-INSPECTION REVIEW**

Last inspection: 03/16/92      Last MIT: Passed 02/04/91

Inj Pressure	
Reported	<b>2200</b>
Allowable	<b>0</b>

Wellhead equipment \_\_\_\_\_

INSPECTION TYPE      ☒ Routine    ☐ PA    ☐ Compliance    ☐ Construction  
☐ Workover    ☐ Enforcement    ☐ Response to emergency or complaint    ☐ Other

**OBSERVED VALUES**

Inj Pressure at wellhead 1600 psig      Gauge range 0-5000 psig  
Inj Pressure at pump \_\_\_\_\_ psig      Gauge range \_\_\_\_\_ psig  
Annulus Pressure 0 psig      Gauge range 0-3000 psig  
Pressure Gauge Present    ☒ Yes    ☐ No

Injection Rate 1129 BWPD      Cumulative Volume 64,832  
Flow Meter Present    ☒ Yes    ☐ No      Located at    ☒ WELL    ☐ PUMP

Meter Type Halliburton MC-II  
☐ Non-resettable    ☒ Resettable    ☐ Rate Indicator    ☐ Other

Operating Status    ☒ Active    ☐ TA    ☐ PA    ☐ Shut in    ☐ Under Construction

PHOTOGRAPHS?    ☐ Yes    ☒ No      How the negatives are numbered: \_\_\_\_\_

*See back of page for comments, site conditions, and compliance followup.*

## UIC Inspection

Comments and site conditions observed during inspection:\_\_\_\_\_

Signature of EPA Inspector(s) \_\_\_\_\_

OFFICE USE ONLY - COMPLIANCE FOLLOWUP

Observed Inj Pressure/Rate/Volume Within Allowed Limits Yes ☐ No ☐

Acceptable fittings at site ☒ Yes ☐ No

Transfer of ownership? ☐ Yes ☒ No OLD \_\_\_\_\_ NEW \_\_\_\_\_

Change in operating status (computer update) ☐ Yes \_\_\_\_\_ ☒ No

Possible violation ☐ Yes ☒ No - Followup Initiated ☐ Yes ☐ No

Staff initials (WILLIAMS) CEW Date 9/30/93

☒ Data Entry

~~[ ]~~ Compliance Staff

☒ 2nd Data Entry

☐ Hard Copy Filing

ENFORCEMENT CONFIDENTIAL

Compliance Status for Well WY2000-02141 09/22/93

UNDERGROUND INJECTION CONTROL PROGRAM: Region VIII DIRECT IMPLEMENTATION

<b>Chevron Production Company, Evanston, WY</b>	Wp ID CVR02
E-30	2R AC as of / /
STEAMBOAT BUTTE	05 03N 01W
Indian? Yes, WIND RIVER	Compliance staff: WILLIAMS
Comment:	

Type of Authorization: Rule authorized on promulgation date 11/25/88

**INSPECTION INFORMATION**

Last inspection 03/16/92	Last MIT 02/04/91 Passed
Inspections to date: 02	MITs to date: 01
Type of inspection: Routine	EPA witnessed? No
Possible violations identified? No	Operator during MIT CVR02
Operator during insp CVR02	Next required MIT: 02/04/96

**MONITORING REPORTS**

1992 report due 02/15/93  
received 02/10/93  
reviewed / /

**OPERATING CONDITIONS**

	Inj Pressure
Reported	2200
Allowable	0

**FINANCIAL RESPONSIBILITY: CVR02FS3**

Established by Chevron Production Company, Evanston, WY  
Type of Demonstration: Financial Statement Amount 0.00  
If Financial Statement, date next is due: 04/30/94  
Comment:

Does the compliance action tracking system show any currently unresolved violations for WY02141? NO.

Does the inventory database show this well as the target of an enforcement action? NO.

**LEGEND:**

■ This mark sets off the values involved in a strong discrepancy:  
operator violation or database error.  
There are 2 such values.

There are no values marked for special notice by the user.



ENFORCEMENT CONFIDENTIAL

Compliance Status for Well WY2000-02141 09/22/93

UNDERGROUND INJECTION CONTROL PROGRAM: Region VIII DIRECT IMPLEMENTATION

<b>Chevron Production Company, Evanston, WY</b>	Op ID CVR02
E-30	2R AC as of / /
STEAMBOAT BUTTE	05 03N 01W
Indian? Yes, WIND RIVER	Compliance staff: WILLIAMS
Comment:	

**MESSAGES DESCRIBING VIOLATIONS OR WARNING CONDITIONS:**

- v[9] The reported injection pressure exceeds the allowed pressure.
- w[23] No review yet despite 45 days since receipt of monitoring report.
- w[24] No pressure limit is given in the file of operating conditions.

U. S. ENVIRONMENTAL PROTECTION AGENCY  
REGION VIII

UIC PROGRAM COMPLIANCE FIELD INSPECTION REPORT

COMPANY: Chevron REPRESENTATIVE: Glen Beaman  
ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_  
FIELD/WELL NAME: E-30 Steamboat Butte  
LOCATION: SE/NE /4; SEC. 5; T 3N; R 1W; COUNTY: Elmore STATE: Wyo

RECORDS INSPECTION

- 1) Injection Rate: Max. \_\_\_\_\_ B/D; Ave. \_\_\_\_\_ B/D; Pmt. Max. \_\_\_\_\_ B/D  
2) Inject. Pressure: Ave. \_\_\_\_\_ psig; Max. \_\_\_\_\_ psig; Pmt. Max. \_\_\_\_\_ psig  
3) Cumulative Injected Volume: \_\_\_\_\_ Bbl Permit #: Wyo 2141  
4) Comments: \_\_\_\_\_

WELLHEAD INSPECTION

General Surface Condition: Good  
[photos, ~~Y~~(N)]

- 1) Injection Rate: 2297 B/D; 2) Meter Type: 632.691 Halliburton  
Location: (at well) (at pump)  
3) Inject. Pressure: (wellhead) 1990 psig; 3a) (pump) \_\_\_\_\_ psig  
Range: 0-5.000 psig Range: \_\_\_\_\_ psig  
Comments: 0 Annulus. (0-3000')

Injected Water Source: \_\_\_\_\_

Water Sampling Location/Techniques/Analyses: \_\_\_\_\_

General Remarks/Comments: \_\_\_\_\_

INSPECTOR(S): Williams / Schantz

DATE: 3/16/92 1:21 PM

RECORD OF COMMUNICATION		<input type="checkbox"/> PHONE CALL <input type="checkbox"/> DISCUSSION <input type="checkbox"/> FIELD TRIP <input type="checkbox"/> CONFERENCE <input type="checkbox"/> OTHER (SPECIFY)	
TO: <span style="font-size: 1.2em;">J. Carson</span>		FROM: <span style="font-size: 1.2em;">Ron Lakey w/ Chevron</span>	
SUBJECT: <span style="font-size: 1.2em;">MIT</span>		(Record of item checked above) DATE: _____ TIME: _____	
<p>SUMMARY OF COMMUNICATION</p> <p style="font-size: 1.2em;">Chevron called for Gus, but call referred to me.</p> <p style="font-size: 1.2em;">Chevron will do MIT on <u>Tribal EI-30</u> (WY02141) in Steamboat Butte Fld. Tomorrow, then return to injection. Told them to send in MIT results to Gus.</p> <p style="font-size: 1.2em;">(This well must be E-30; WY02141 ✓)</p> <div style="display: flex; justify-content: space-between; align-items: flex-end;"> <div style="width: 30%;"> <p style="font-size: 1.2em;">@2/4/91</p> <p style="font-size: 1.2em;">Actual 2-2-91</p> </div> <div style="width: 60%;"> <p style="font-size: 1.2em;">Ron Lakey T.C.</p> <p style="font-size: 1.2em;">EI-30 MIT'd for 45 min @ 530 PSL</p> <p style="font-size: 1.2em;">w/ no loss in annulus pressure —</p> <ul style="list-style-type: none"> <li>- Authorized resumption of injection</li> <li>- They'll send summary w/ <u>pressure recording chart</u>.</li> </ul> </div> <div style="width: 10%; text-align: right;"> <p style="font-size: 1.2em;">2/4/91</p> <p style="font-size: 1.2em;">GA</p> <p style="font-size: 1.2em;">CW</p> </div> </div>			



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION VIII

999 18th STREET - SUITE 500  
DENVER, COLORADO 80202-2405

JUN 13 1991

Ref: 8WM-DW

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED  
P 806-482-976

WY02141

Ms. Jeanette NewVille  
Chevron U.S.A., Inc.  
P.O. Box 111  
Riverton, WY 82501

RE: Mechanical Integrity Test  
EPA Form #3560-1A

Dear Ms. NewVille:

It appears that in the past your Mechanical Integrity Test (MIT) results, which you have been sending to the Environmental Protection Agency (EPA), have been reported on an inappropriate form. They have been reported on "Bureau of Land Management Report Sundry Notices."

In the future, each Mechanical Integrity Test must be reported on the EPA "Mechanical Integrity Pressure Test Casing/Tubing Annulus" form [EPA R8 3560-1A (8/89)]. This is necessary so that we may properly evaluate the test results. We are enclosing a copy of Form #3560-1A for your use.

We appreciate your cooperation in this matter, and you may contact me at (303) 293-1544 or Chuck Williams at (303) 293-1550.

Sincerely,

Thomas J. Pike, Chief  
UIC Implementation Section

Enclosure



6					6		
---	--	--	--	--	---	--	--

DOMESTIC RETURN RECEIPT

RECORD OF  
COMMUNICATION

☒ PHONE CALL ☐ DISCUSSION ☐ FIELD TRIP ☐ CONFERENCE  
☐ OTHER (SPECIFY)

(Record of item checked above)

TO:

J. Carson

FROM:

Dough Walton  
Chevron

DATE

12/27/90

TIME

10:30

SUBJECT

SUMMARY OF COMMUNICATION

Dough Walton w/ Chevron called to report pressure on back side of Tribal E-30 in Steamboat Butte Fld, Fremont Co, WY. Well is now shut-in. Will follow with letter reporting details and workover results.

WYO 2141

CONCLUSIONS, ACTION TAKEN OR REQUIRED

INFORMATION COPIES

TO:

C. Trasley

U. S. ENVIRONMENTAL PROTECTION AGENCY  
REGION VIII

UIC PROGRAM COMPLIANCE FIELD INSPECTION REPORT

WY02141

Butch Preston, Riverton  
(307) 856-6228  
Field Foreman

COMPANY: Chevron, USA REPRESENTATIVE: Emily Corder, Env. Coord.  
ADDRESS: Steamboat Butte Field PHONE: (303) 930-3652  
FIELD/WELL NAME: E-30  
LOCATION: SWNE /4; SEC. 5; T 3N; R 1W; COUNTY: Fremont STATE: WY

RECORDS INSPECTION

- 1) Injection Rate: Max. \_\_\_\_\_ B/D; Ave. \_\_\_\_\_ B/D; Pmt. Max. \_\_\_\_\_ B/D
- 2) Inject. Pressure: Ave. \_\_\_\_\_ psig; Max. \_\_\_\_\_ psig; Pmt. Max. \_\_\_\_\_ psig
- 3) Cumulative Injected Volume: \_\_\_\_\_ Bbl Permit #: \_\_\_\_\_
- 4) Comments: \_\_\_\_\_

WELLHEAD INSPECTION

General Surface Condition: Good (N)  
[photos, (Y)(N)]

- \* { 1) Injection Rate: 2127 B/D; 2) Meter Type: 0-5000  
Location: (at well) (at pump)  
3) Inject. Pressure: (wellhead) 1350 psig; 3a) (pump) \_\_\_\_\_ psig  
Range: \_\_\_\_\_ psig Range: \_\_\_\_\_ psig

Comments: Tenskip injection zone 6991'-7148'

Injected Water Source: \_\_\_\_\_

Water Sampling Location/Techniques/Analyses \_\_\_\_\_

General Remarks/Comments Cum-Vol. 4/5/89: 305,365 bbls.

\* Halliburton Flow Analyzer

INSPECTOR(S): Emmett Schmitz & Gus Stolz

DATE: April 5, 1989

# Inspection Report For Well: WY20000 - 02141

U.S. Environmental Protection Agency  
Underground Injection Control Program, 8ENF-T  
999 18th Street, Suite 300, Denver, CO 80202-2466  
This form was printed on 7/10/2014

INSPECTOR(S): Lead: Ajayi, Christopher Date: 7/15/2014  
Others: Breffe, Don Time: 9:23 (am) pm  
OPERATOR (only if different): Arlan Arnejo  
REPRESENTATIVE(S): Lokio St Clair - tribe

## PRE-INSPECTION REVIEW

### Marathon Oil Company

Well Name: Tribal EI-30 Tensleep  
Well Type: Enhanced Recovery (2R)  
Operating Status: AC (ACTIVE) as of 12/31/2002  
Oil Field: Steamboat Butte  
Location: SWNE S5 T3N R1W  
Indian Country: X, Wind River  
Last Inspection: 10/3/2012 Allowable Inj Pressure: 1830 /  
Last MIT: Pass 10/27/2010 Annulus Pressure From Last MIT: 1002

BLACK = POSSIBLE VIOLATION

INSPECTION TYPE: ☐ Construction / Workover ☐ Response to Complaint ☐ Other  
(Select One) ☐ Plugging ☐ Routine  
☐ Post-Closure ☐ Witness MIT

ICIS Entered

Date 5/11/14

Initials JB

### OBSERVED VALUES:

Tubing Gauge: ☒ Yes Pressure: U: 1310 L: psig Gauge Owner: ☒ EPA  
☐ No Gauge Range: 0-2000 psig ☐ Operator

Annulus Gauge: ☒ Yes Pressure: 0 psig Gauge Owner: ☒ EPA  
☐ No Gauge Range: Open psig ☐ Operator

Bradenhead Gauge: ☐ Yes Pressure: \_\_\_\_\_ psig Gauge Owner: ☐ EPA  
☐ No Gauge Range: \_\_\_\_\_ psig ☐ Operator

Pump Gauge: ☐ Yes Pressure: \_\_\_\_\_ psig Gauge Owner: ☐ EPA  
☐ No Gauge Range: \_\_\_\_\_ psig ☐ Operator

Operating Status: ☒ Active ☐ Not Injecting ☐ Plugged and Abandoned  
(Select One) ☐ Being Reworked ☐ Production ☐ Under Construction

U2 Entered

Date 7/29/14 See page 2 for photos, comments, and site conditions.  
Initial JB

GREEN	BLUE	CBI
	(	



Inspection Report For Well: WY20000 - 02141 (PAGE 2)

PHOTOGRAPHS:

☐ Yes  
☒ No

List of photos taken: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Comments and site conditions observed during inspection: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

GPS: GPS File ID: \_\_\_\_\_

Signature of EPA Inspector(s):

Don Bell Alvin M. [Signature] \_\_\_\_\_

☐ Data Entry

☐ Compliance Staff

☐ Hard Copy Filing

# NOTICE OF INSPECTION



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION VIII, 999 18TH STREET - SUITE 500  
DENVER, COLORADO 80202-2405

Date: 7/15/14

Notice of inspection is hereby given according to Section 1445(b) of the Safe Drinking Water Act (42 U.S.C. §300f et seq.).

Hour: 8:00

Firm Name: Marathon

Firm Address: 27 Maverick Springs Rd Kincaid, WY

## REASON FOR INSPECTION:

For the purpose of inspecting records, files, papers, processes, controls and facilities, and obtaining samples to determine whether the person subject to an applicable underground injection control program has acted or is acting in compliance with the Safe Drinking Water Act and any applicable condition of permit or rule authorization.

## SECTION 1445(b) of the SAFE DRINKING WATER ACT is quoted below:

Section 1445(b)(1): Except as provided in Paragraph (2), the Administrator, or representatives of the Administrator duly designated by him, upon presenting appropriate credentials, and a written notice to any supplier of water or other person subject to (a), or person subject (A) a national primary drinking water regulation prescribed under Section 1412(B) an applicable Underground Injection Control Program, or (C) any requirement to monitor an unregulated contaminant pursuant to subsection (a), or person in charge of any of the property of such supplier or other person referred to in clause (A), (B), or (C), is authorized to enter any establishment, ... facility, or other property of such supplier or other person in order to determine whether such supplier or other person has acted or is acting in compliance with this title, including for this purpose, inspection, at reasonable times, of records, files, papers, processes, controls, and facilities, or in order to test any feature of a public water system, including its raw water source. The Administrator or the Comptroller General (or any representative designated by either) shall have access for the purpose of audit and examination to any records, reports, or information of a grantee which are required to be maintained under subsection (a) or which are pertinent to any financial assistance under this title.

Christopher Ajayi  
Inspector's Name & Title (Print)

Don Breth

[Signature]  
Inspector's Signature

[Signature]

# Inspection Report For Well: WY20000 - 02141

U.S. Environmental Protection Agency  
Underground Injection Control Program, 8ENF-T  
999 18th Street, Suite 300, Denver, CO 80202-2466

This form was printed on 9/25/2012

INSPECTOR(S): Lead: Breffle, Don

Date: 10/3/2012

Others: Bowling, Linda

Time: 9:16 am/pm

OPERATOR (only if different):

William Velarde Jr

REPRESENTATIVE(S):

## PRE-INSPECTION REVIEW

### Marathon Oil Company

Well Name: Tribal EI-30 Tensleep

Well Type: Enhanced Recovery (2R)

Operating Status: AC (ACTIVE) as of 12/31/2002

Oil Field: Steamboat Butte

Location: SWNE S5 T3N R1W

Indian Country: X, Wind River

Last Inspection: 10/19/2010

Allowable Inj Pressure: 1830 /

Last MIT: Pass 10/27/2010

Annulus Pressure From Last MIT: 1002

BLACK = POSSIBLE VIOLATION

### INSPECTION TYPE:

(Select One)

☐ Construction / Workover

☐ Plugging

☐ Post-Closure

☐ Response to Complaint

☒ Routine

☐ Witness MIT

☐ Other

Date: 10/2/12

Initial: DB

### OBSERVED VALUES:

Tubing Gauge:

☒ Yes

☐ No

Pressure: U: 1290 / L: 1360 psig

Gauge Range: 0-2000 psig

Gauge Owner: ☒ EPA

☐ Operator

Annulus Gauge:

☒ Yes

☐ No

Pressure: 0 psig

Gauge Range: opened annulus psig

Gauge Owner: ☒ EPA

☐ Operator

Bradenhead Gauge:

☐ Yes

☐ No

Pressure: \_\_\_\_\_ psig

Gauge Range: \_\_\_\_\_ psig

Gauge Owner: ☐ EPA

☐ Operator

Pump Gauge:

☐ Yes

☐ No

Pressure: \_\_\_\_\_ psig

Gauge Range: \_\_\_\_\_ psig

Gauge Owner: ☐ EPA

☐ Operator

Operating Status:

(Select One)

☒ Active

☐ Being Reworked

☐ Not Injecting

☐ Production

☐ Plugged and Abandoned

☐ Under Construction

See page 2 for photos, comments, and site conditions.

Date: 10/4/12

Initials: DB

## Inspection Report For Well: WY20000 - 02141 (PAGE 2)

**PHOTOGRAPHS:**

☐

Yes

☒

No

List of photos taken: \_\_\_\_\_

---

---

---

**Comments and site conditions observed during inspection:** \_\_\_\_\_

---

---

---

---

---

---

---

---

**GPS:** GPS File ID: \_\_\_\_\_

Signature of EPA Inspector(s):

☐

Data Entry

☐

Compliance Staff

☐

Hard Copy Filing



# NOTICE OF INSPECTION



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION VIII, 999 18TH STREET - SUITE 500  
DENVER, COLORADO 80202-2405

Date: 10/2/14

Notice of inspection is hereby given according to Section 1445(b) of the Safe Drinking Water Act (42 U.S.C. §300f et seq.).

Hour: 8:00

Firm Name: Marathon Oil Co

Firm Address: 27 Maverick Springs Rd  
Kinross, WY 82516

## REASON FOR INSPECTION:

For the purpose of inspecting records, files, papers, processes, controls and facilities, and obtaining samples to determine whether the person subject to an applicable underground injection control program has acted or is acting in compliance with the Safe Drinking Water Act and any applicable condition of permit or rule authorization.

## SECTION 1445(b) of the SAFE DRINKING WATER ACT is quoted below:

Section 1445(b)(1): Except as provided in Paragraph (2), the Administrator, or representatives of the Administrator duly designated by him, upon presenting appropriate credentials, and a written notice to any supplier of water or other person subject to (a), or person subject (A) a national primary drinking water regulation prescribed under Section 1412(B) an applicable Underground Injection Control Program, or (C) any requirement to monitor an unregulated contaminant pursuant to subsection (a), or person in charge of any of the property of such supplier or other person referred to in clause (A), (B), or (C), is authorized to enter any establishment, ... facility, or other property of such supplier or other person in order to determine whether such supplier or other person has acted or is acting in compliance with this title, including for this purpose, inspection, at reasonable times, of records, files, papers, processes, controls, and facilities, or in order to test any feature of a public water system, including its raw water source. The Administrator or the Comptroller General (or any representative designated by either) shall have access for the purpose of audit and examination to any records, reports, or information of a grantee which are required to be maintained under subsection (a) or which are pertinent to any financial assistance under this title.

Don Breille  
Inspector's Name & Title (Print)

Don Breille  
Inspector's Signature



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8

1595 Wynkoop Street  
DENVER, CO 80202-1129  
Phone 800-227-8917  
<http://www.epa.gov/region08>

Rec'd 11/8/10

JEB

RPM on 11/15/10

Ref: 8ENF-UFO

NOV 04 2010

CERTIFIED MAIL 7005-0390-0000-4848-8840  
RETURN RECEIPT REQUESTED

Randy Meabon, Regulatory Coordinator  
Marathon Oil Company  
1501 Stampede Avenue  
Cody, Wyoming 82414



Re: Underground Injection Control (UIC)  
Notice of Violations:  
Failure to Timely Demonstrate Mechanical Integrity (9 wells); Inaccurate Gauge; and  
Failure to Monitor Temporarily Abandoned Well  
Steamboat Butte and Circle Ridge Oilfields  
Fremont County, WY

Dear Mr. Meabon:

On October 19, 2010, EPA representatives conducted a routine inspection of the Class II injection wells owned by Marathon Oil Company ("Marathon") in the steamboat butte and circle ridge oilfields. During the inspection, operator representatives stated to EPA inspectors that the well named "Brinkerhoff 4," currently temporarily abandoned and operating under rule authorization under EPA ID WY20000-02133, has not been monitored regularly as required by Title 40 of the Code of Federal Regulations (40 C.F.R.) Section 144.28(g)(2). Marathon's failure to regularly monitor the Brinkerhoff 4 well is a violation.

EPA inspectors were told that the Marathon pressure gauge on the well named "Tribal S-1," operating under EPA permit ID WY 20866-02130, which read 1250 pounds per square inch (psi), was used for monitoring, recording and reporting purposes. Two calibrated EPA gauges read the pressure to be 1325 psi indicating Marathon's gauge was reading approximately seventy-five (75) psi too low. Accurate and representative monitoring is required by Title 40 C.F.R. Section 144.51(j). Marathon's use of a gauge displaying incorrect pressure is a violation.

According to our files, Marathon failed to timely demonstrate mechanical integrity (MI) for nine (9) wells listed in a table enclosed with this notice. Pursuant to 40 C.F.R. Section 146.23(b)(3), Marathon is required on any active injection well to demonstrate MI at least every five years.

Pursuant to 40 C.F.R Section 144.28(c)(2)(iv), every two years of continuous temporary abandonment, Marathon is required to ensure that the well, if not properly plugged and abandoned, will not endanger underground sources of drinking water. A successful MIT is an acceptable non-endangerment demonstration. Failure to timely demonstrate mechanical integrity for these nine (9) wells is a violation.

Within thirty (30) days of receipt of this letter, please submit a letter describing what action Marathon intends to take to address these violations and how Marathon intends to prevent them from occurring in the future. Failure to comply with the UIC regulations found at 40 C.F.R. Parts 144 through 148 constitutes one or more violations of the Safe Drinking Water Act, 42 U.S.C. §300h. Such non-compliance may subject Marathon to formal enforcement by EPA, as codified at 40 C.F.R. Part 22.

If you have any questions concerning this letter, you may contact Sarah Roberts at (303) 312-7056. Please direct all correspondence to the attention of Sarah Roberts at Mail Code 8ENF-UFO.

Sincerely,



*SAS*  
Sandra A. Stavnes, Director  
UIC/FIFRA/OPA Technical  
Enforcement Programs

Enclosure: Table listing the nine (9) wells operated by Marathon Oil Company that are overdue for a mechanical integrity (MI) demonstration.

EPA ID Number	Well Name	Status	Previous MI Demonstration Date	Due Date for MI Demonstration	Most Recent MI Demonstration Date
WY20839-02129	Tribal E-26	Active	7/13/2005	7/13/2010	Ongoing violation
WY20825-04382	Tribal C-28	Active	7/13/2005	7/13/2010	Ongoing violation
WY20000-02167	Shoshone 65-12	Active	7/14/2005	7/14/2010	Ongoing violation
WY20000-02171	Shoshone 65-26	Active	7/14/2005	7/14/2010	Ongoing violation
WY20000-02178	Shoshone 65-40	Active	7/14/2005	7/14/2010	Ongoing violation
WY20000-02173	Shoshone 65-29	Temporarily Abandoned	8/22/2008	8/22/2010	Ongoing violation
WY20710-02172	Shoshone 65-28	Active	7/14/2005	7/14/2010	Ongoing violation
WY20708-02176	Shoshone 65-70	Active	7/14/2005	7/14/2010	Ongoing violation
WY20000-02155	Shoshone 63-44	Temporarily Abandoned	8/21/2008	8/21/2010	Ongoing violation



# Inspection Report For Well: WY20000 - 02141

U.S. Environmental Protection Agency  
Underground Injection Control Program, 8ENF-T  
999 18th Street, Suite 300, Denver, CO 80202-2466

This form was printed on 10/14/2010

INSPECTOR(S): Lead: Roberts, Sarah Date: 10/19/2010  
Others: Breffle, Don Time: 9:40 am pm  
OPERATOR (only if different): Tucker Hanks  
REPRESENTATIVE(S):

PRE-INSPECTION REVIEW			
<b>Marathon Oil Company</b>			
Well Name:	Tribal EI-30 Tensleep		
Well Type:	Enhanced Recovery (2R)		
Operating Status:	AC (ACTIVE) as of 12/31/2002		
Oil Field:	Steamboat Butte		
Location:	SWNE S5 T3N R1W		
Indian Country:	X, Wind River		
Last Inspection:	7/7/2009	Allowable Inj Pressure:	1830
Last MIT:	Pass 7/13/2005	Annulus Pressure From Last MIT:	1000

	GREEN	BLUE	CBI
TAB		1	

ICIS Entered  
Date 10/22/10  
Initials DB

BLACK = POSSIBLE VIOLATION

INSPECTION TYPE: (Select One)  
☐ Construction / Workover  
☐ Plugging  
☐ Post-Closure  
☒ Response to Complaint  
☒ Routine  
☐ Witness MIT  
☐ Other

## OBSERVED VALUES:

Tubing Gauge:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Pressure: U: 1220 / L: _____ psig Gauge Range: 0 - 2000 psig	Gauge Owner: <input checked="" type="checkbox"/> EPA <input type="checkbox"/> Operator
Annulus Gauge:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Pressure: 0 psig Gauge Range: 0 - 2000 psig	Gauge Owner: <input type="checkbox"/> EPA <input type="checkbox"/> Operator
Bradenhead Gauge:	<input type="checkbox"/> Yes <input type="checkbox"/> No	Pressure: _____ psig Gauge Range: _____ psig	Gauge Owner: <input type="checkbox"/> EPA <input type="checkbox"/> Operator
Pump Gauge:	<input type="checkbox"/> Yes <input type="checkbox"/> No	Pressure: _____ psig Gauge Range: _____ psig	Gauge Owner: <input type="checkbox"/> EPA <input type="checkbox"/> Operator
Operating Status: (Select One)	<input checked="" type="checkbox"/> Active <input type="checkbox"/> Being Reworked	<input type="checkbox"/> Not Injecting <input type="checkbox"/> Production	<input type="checkbox"/> Plugged and Abandoned <input type="checkbox"/> Under Construction

	GREEN	BLUE	CBI
TAB		1	

See page 2 for photos, comments, and site conditions.

U2 Entered  
Date 10/26/10  
Initial RR

**Inspection Report For Well: WY20000 - 02141 (PAGE 2)**

**PHOTOGRAPHS:**

☐ Yes  
☒ No

List of photos taken: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Comments and site conditions observed during inspection:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**GPS:** GPS File ID: \_\_\_\_\_

Signature of EPA Inspector(s):



☐ Data Entry

☐ Compliance Staff

☐ Hard Copy Filing

# NOTICE OF INSPECTION



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION VIII, 999 18TH STREET - SUITE 500  
DENVER, COLORADO 80202-2405

Date: 10/19/10

Notice of inspection is hereby given according to Section 1445(b) of the Safe Drinking Water Act (42 U.S.C. §300f et seq.).

Hour: 8:30a

Firm Name: Marathon Oil Company

Firm Address: 27 Maverick Springs Road  
Kinnebar, WY 82516

## REASON FOR INSPECTION:

For the purpose of inspecting records, files, papers, processes, controls and facilities, and obtaining samples to determine whether the person subject to an applicable underground injection control program has acted or is acting in compliance with the Safe Drinking Water Act and any applicable condition of permit or rule authorization.

## SECTION 1445(b) of the SAFE DRINKING WATER ACT is quoted below:

Section 1445(b)(1): Except as provided in Paragraph (2), the Administrator, or representatives of the Administrator duly designated by him, upon presenting appropriate credentials, and a written notice to any supplier of water or other person subject to (a), or person subject (A) a national primary drinking water regulation prescribed under Section 1412(B) an applicable Underground Injection Control Program, or (C) any requirement to monitor an unregulated contaminant pursuant to subsection (a), or person in charge of any of the property of such supplier or other person referred to in clause (A), (B), or (C), is authorized to enter any establishment, ... facility, or other property of such supplier or other person in order to determine whether such supplier or other person has acted or is acting in compliance with this title, including for this purpose, inspection, at reasonable times, of records, files, papers, processes, controls, and facilities, or in order to test any feature of a public water system, including its raw water source. The Administrator or the Comptroller General (or any representative designated by either) shall have access for the purpose of audit and examination to any records, reports, or information of a grantee which are required to be maintained under subsection (a) or which are pertinent to any financial assistance under this title.

Sarah Roberts

Inspector's Name & Title (Print)

Dan Breffle

[Signature]  
Inspector's Signature

# Inspection Report For Well: WY20000 - 02141

U.S. Environmental Protection Agency  
Underground Injection Control Program, 8ENF-T  
999 18th Street, Suite 300, Denver, CO 80202-2466

This form was printed on 6/22/2009

INSPECTOR(S): Lead: Wiser, Nathan

Date: 7/7/2009

Others: Bowling, Linda Sumaiku, Yohan

Time: 6:24 ~~am~~ pm

OPERATOR (only if different): Tucker Hicks

REPRESENTATIVE(S): Lokilo St. Clair, Stanford Ware

## PRE-INSPECTION REVIEW

### Marathon Oil Company

Well Name: Tribal EI-30 Tensleep  
Well Type: Enhanced Recovery (2R)  
Operating Status: AC (ACTIVE) as of 12/31/2002  
Oil Field: Steamboat Butte  
Location: SWNE S5 T3N R1W  
Indian Country: X, Wind River

	GREEN	BLUE	CBI
TAB		/	

Last Inspection: 10/5/2006  
Last MIT: Pass 7/13/2005

Allowable Inj Pressure: 1830 /  
Annulus Pressure From Last MIT: 1000

BLACK = POSSIBLE VIOLATION

### INSPECTION TYPE: (Select One)

- ☐ Construction / Workover  
☐ Plugging  
☐ Post-Closure  
☐ Response to Complaint  
☒ Routine  
☐ Witness MIT  
☐ Other

### OBSERVED VALUES:

Tubing Gauge: ☒ Yes Pressure: U: 1040 / L: \_\_\_\_\_ psig Gauge Owner: ☒ EPA  
☐ No Gauge Range: 0 - 2000 psig ☐ Operator

Annulus Gauge: ☒ Yes Pressure: \_\_\_\_\_ psig Gauge Owner: ☒ EPA  
☐ No Gauge Range: 0 - 2000 psig ☐ Operator

Bradenhead Gauge: ☐ Yes Pressure: \_\_\_\_\_ psig Gauge Owner: ☐ EPA  
☒ No Gauge Range: \_\_\_\_\_ psig ☐ Operator

Pump Gauge: ☐ Yes Pressure: \_\_\_\_\_ psig Gauge Owner: ☐ EPA  
☒ No Gauge Range: \_\_\_\_\_ psig ☐ Operator

Operating Status: ☒ Active ☐ Not Injecting ☐ Plugged and Abandoned  
(Select One) ☐ Being Reworked ☐ Production ☐ Under Construction

See page 2 for photos, comments, and site conditions.

JZ Entered  
Date August 10, 2009  
Initial

ICIS Entered  
Date July 28, 2009  
Initial

Inspection Report For Well: WY20000 - 02141 (PAGE 2)

PHOTOGRAPHS:

☐ Yes  
☒ No

List of photos taken: \_\_\_\_\_

Comments and site conditions observed during inspection: \_\_\_\_\_

Bled off pressure

GPS: GPS File ID: \_\_\_\_\_

Signature of EPA Inspector(s):

John M. G. Linda M. Bowling Sumaira

☐ Data Entry

☐ Compliance Staff

☐ Hard Copy Filing



# NOTICE OF INSPECTION



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region VIII, 1595 Wynkoop Street  
Denver, Colorado 80202-1129

Date: 7/7/09

Hour: 9:15 am

Notice of inspection is hereby given according to Section 1445(b) of the Safe Drinking Water Act (42 U.S.C. §300f et seq.).

Firm Name: MARATHON OIL COMPANY

Firm Address: 1501 Stampede Avenue  
Cody, WY 82414

### REASON FOR INSPECTION:

For the purpose of inspecting records, files, papers, processes, controls and facilities, and obtaining samples to determine whether the person subject to an applicable underground injection control program has acted or is acting in compliance with the Safe Drinking Water Act and any applicable condition of permit or rule authorization.

### SECTION 1445(b) of the SAFE DRINKING WATER ACT is quoted below:

*Section 1445(b)(1): Except as provided in Paragraph (2), the Administrator, or representatives of the Administrator duly designated by him, upon presenting appropriate credentials, and a written notice to any supplier of water or other person subject to (a), or person subject (A) a national primary drinking water regulation prescribed under Section 1412(B) an applicable Underground Injection Control Program, or (C) any requirement to monitor an unregulated contaminant pursuant to subsection (a), or person in charge of any of the property of such supplier or other person referred to in clause (A), (B), or (C), is authorized to enter any establishment, ... facility, or other property of such supplier or other person in order to determine whether such supplier or other person has acted or is acting in compliance with this title, including for this purpose, inspection, at reasonable times, of records, files, papers, processes, controls, and facilities, or in order to test any feature of a public water system, including its raw water source. The Administrator or the Comptroller General (or any representative designated by either) shall have access for the purpose of audit and examination to any records, reports, or information of a grantee which are required to be maintained under subsection (a) or which are pertinent to any financial assistance under this title.*

Nathan Wiser, Linda Bowling, Yohan Sumaiku

Inspector's Name & Title (Print)

Inspector's Signature



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8

1595 Wynkoop Street  
DENVER, CO 80202-1129  
Phone 800-227-8917  
<http://www.epa.gov/region08>

January 16, 2009

Ref: 8ENF-UFO

Randy Meabon  
Marathon Oil Company  
1501 Stampede Avenue  
P.O. Box 2690  
Cody, WY 82414

WY 20000 - 02141

	GREEN	BLUE	CBI
TAB		/	

Re: UNDERGROUND INJECTION CONTROL (UIC)  
Courtesy Reminder to Submit Annual Injection  
Well Monitoring Report and Fluid Analysis

Dear Mr. Meabon:

The purpose of this letter is to remind all Class II injection well operators about standard annual reporting requirements. This is a courtesy reminder to all Class II injection well operators to comply with certain annual reporting requirements. Specifically, I am reminding you to submit your annual monitoring reports, and as applicable, a chemical analysis of injected fluids. Enclosed is a blank annual monitoring report form and accompanying instructions. This form is also on-line at the EPA UIC program's website <http://www.epa.gov/safewater/uic/index.html>. If required by permit, please remember to submit a chemical analysis representative of fluid injected during 2008 unless no injection occurred during 2008. Submissions to EPA of annual monitoring reports and chemical analyses must be postmarked by **February 15, 2009**.

As in years past, this reminder is being sent to operators under the jurisdiction of the U.S. EPA Region 8 program as a courtesy. Given possible reduction in resources this courtesy letter may not be possible in the future, but that would not affect your duty to comply with these requirements.

Failure to comply with a UIC permit or the UIC regulations found at 40 C.F.R. Parts 144 through 148 constitutes one or more violations of the Safe Drinking Water Act, 42 U.S.C. §300h. Such non-compliance may subject you to formal enforcement by EPA, as codified at 40 C.F.R. Part 22.

If you have any questions about matters raised in this letter, please feel free to contact Nathan Wiser of my staff at (303) 312-6211. The fax number for the UIC Program's Technical Enforcement Program is (303) 312-6953.

Sincerely,

A handwritten signature in cursive script, appearing to read "Mark A.R. Chalfant".

Mark A.R. Chalfant

Director

Technical Enforcement Program

Enclosures: 1. Blank Form 7520-11 (Annual Disposal/Injection Well Monitoring Report)  
2. Instructions for Class II well reporting  
3. Print out of injection wells from EPA's UIC database for Class II operators

## **ENCLOSURE - Instructions for Annual Reporting**

Please find a recent print-out from EPA's Region 8 UIC database displaying the Class II injection wells to which these reporting requirements apply. There may be additional reporting requirements established in each UIC Class II permit. While meant to be helpful and complete, this print-out may not reflect each and every Class II injection well for each operator.

### **Instructions for Completing EPA Form 7520-11 (Annual Disposal/Injection Well Monitoring Report)**

1. Complete a separate form for each well, and write the EPA permit/ID number on each.
2. A form must be submitted for any injection well with an unplugged status at any point during the reporting period (calendar year 2008), including those wells which may have been transferred to or from another company at some point during the reporting period. This specifically includes injection wells that have not been used for injection but once were.
3. When completing this form, insert only actual numeric values into the columns, rather than leaving them blank. Do not use marks like " - " or " \* " to substitute for the value zero. A well that has been temporarily abandoned must still be periodically observed and pressure and rate values recorded.
4. All monthly values must be filled in and must be actual observed values. Further, please report the maximum observed wellhead injection pressure, not just the average injection pressure, for each month in the reporting period. Most injection well permits also require the submission of observed of wellhead annulus pressures.
5. Each completed form must be signed and dated.
6. The due date for annual monitoring reports is February 15, 2009.

### **Instructions for Submitting a Chemical Analysis (there is no EPA form for this)**

1. If required by permit and if there was fluid injected during 2008, a chemical analysis representative of fluid injected during 2008 must be submitted. Permit conditions typically require an analysis for at least pH, total dissolved solids, specific conductivity and specific gravity. Check your UIC permit(s) for further information. Include the EPA permit/ID number(s) with each applicable analysis.
2. The due date for chemical analysis reports is February 15, 2009.

Send all reporting to the following address:

U.S. Environmental Protection Agency, Region 8  
1595 Wynkoop Street  
Denver, Colorado 80202  
Attention: Nathan Wiser (Mail Code: 8ENF-UFO)



# UNDERGROUND INJECTION CONTROL - DEEP WELL PROGRAM

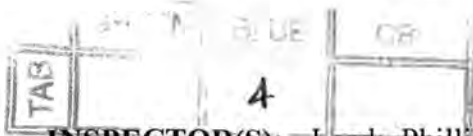
## WELL INVENTORY REPORT (Sorted by Operator)

File No:	Well Name / Well Type / Oper Status:	N/E/C:	Oil Field Name:	S/T/R:	State:	Tribe Name:
WY20000-02141	Tribal EI-30 Tensleep Enhanced Recovery (2R) AC (Active)	Existing	Steamboat Butte	SWNE S5 T3N R1W	WY	Wind River
WY20000-02143	Tribal CI-30X Tensleep Enhanced Recovery (2R) AC (Active)	Existing	Steamboat Butte	SENE S32 T4N R1W	WY	Wind River
WY20000-02145	Tribal CI-1 Nugget Enhanced Recovery (2R) AC (Active)	Existing	Steamboat Butte	SWSW S32 T4N R1W	WY	Wind River
WY20000-02146	Tribal CI-27 Tensleep Enhanced Recovery (2R) AC (Active)	Existing	Steamboat Butte	SWSE S32 T4N R1W	WY	Wind River
WY20000-02149	Shoshone 63-24 Amsden Enhanced Recovery (2R) AC (Active)	Existing	Circle Ridge	SWNW S6 T6N R2W	WY	Wind River
WY20000-02150	Shoshone 63-27 Amsden Enhanced Recovery (2R) AC (Active)	Existing	Circle Ridge	SWNW S6 T6N R2W	WY	Wind River
WY20000-02167	Shoshone 65-12 Tensleep Enhanced Recovery (2R) AC (Active)	Existing	Circle Ridge	SESE S36 T7N R3W	WY	Wind River
WY20000-02169	Shoshone 65-20 Enhanced Recovery (2R) AC (Active)	Existing	Circle Ridge	SESE S36 T7N R3W	WY	Wind River



# Inspection Report For Well: WY20000 - 02141

U.S. Environmental Protection Agency  
Underground Injection Control Program, 8ENF-T  
999 18th Street, Suite 300, Denver, CO 80202-2466  
This form was printed on 9/29/2006



INSPECTOR(S): Lead: Phillips, Kenneth

Date: 10/5/2006

Others: Becker, Robert / LOKILO ST. CLAIR

Time: 10:27 am/pm

OPERATOR (only if different):

REPRESENTATIVE(S): J. D. BARQUIN

## PRE-INSPECTION REVIEW

### Marathon Oil Company

Well Name: Tribal EI-30 Tensleep

Well Type: Enhanced Recovery (2R)

Operating Status: AC (ACTIVE) as of 12/31/2002

Oil Field: Steamboat Butte

Location: XXXXX AS 1311 R/W

Indian Country: X, Wind River

Last Inspection: 10/25/2005

Last MIT: Pass 7/13/2005

Allowable Inj Pressure: 1830 /

Annulus Pressure From Last MIT: 1000

BLACK = POSSIBLE VIOLATION

U2 Entered  
Date 10/12/06  
Initial ZOP

ICIS Entered  
Date 10/31/06  
Initial ZOP

### INSPECTION TYPE: (Select One)

☐ Construction / Workover  
☐ Plugging  
☐ Post-Closure

☐ Response to Complaint  
☒ Routine  
☐ Witness MIT

☐ Other

### OBSERVED VALUES:

Tubing Gauge: ☒ Yes Pressure: U: 1264/L: \_\_\_\_\_ psig Gauge Owner: ☐ EPA  
☐ No Gauge Range: DIGITAL \_\_\_\_\_ psig ☒ Operator

Annulus Gauge: ☒ Yes Pressure: 1 \_\_\_\_\_ psig Gauge Owner: ☐ EPA  
☐ No Gauge Range: DIGITAL \_\_\_\_\_ psig ☒ Operator

Bradenhead Gauge: ☐ Yes Pressure: \_\_\_\_\_ psig Gauge Owner: ☐ EPA  
☒ No Gauge Range: \_\_\_\_\_ psig ☐ Operator

Pump Gauge: ☒ Yes Pressure: \_\_\_\_\_ psig Gauge Owner: ☐ EPA  
☐ No Gauge Range: \_\_\_\_\_ psig ☐ Operator

Operating Status: ☒ Active ☐ Not Injecting ☐ Plugged and Abandoned  
(Select One) ☐ Being Reworked ☐ Production ☐ Under Construction

See page 2 for photos, comments, and site conditions.

## Inspection Report For Well: WY20000 - 02141 (PAGE 2)

### PHOTOGRAPHS:

☐ Yes  
☒ No

List of photos taken: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Comments and site conditions observed during inspection: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

GPS: GPS File ID: \_\_\_\_\_

Signature of EPA Inspector(s):

 \_\_\_\_\_

☐ Data Entry

☐ Compliance Staff

☐ Hard Copy Filing

# NOTICE OF INSPECTION



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION VIII, 999 18TH STREET - SUITE 500  
DENVER, COLORADO 80202-2405

Date: 10/5/86

Notice of inspection is hereby given according to Section 1445(b) of the Safe Drinking Water Act (42 U.S.C. §300f et seq).

Hour: 8:00 AM

Firm Name: MARATHON PRODUCTION CO.

Firm Address: P.O. Box 130  
KINDER, WY 82516

## REASON FOR INSPECTION:

For the purpose of inspecting records, files, papers, processes, controls and facilities, and obtaining samples to determine whether the person subject to an applicable underground injection control program has acted or is acting in compliance with the Safe Drinking Water Act and any applicable condition of permit or rule authorization.

## SECTION 1445(b) of the SAFE DRINKING WATER ACT is quoted below:

Section 1445(b)(1): Except as provided in Paragraph (2), the Administrator, or representatives of the Administrator duly designated by him, upon presenting appropriate credentials, and a written notice to any supplier of water or other person subject to (a), or person subject (A) a national primary drinking water regulation prescribed under Section 1412(B) an applicable Underground Injection Control Program, or (C) any requirement to monitor an unregulated contaminant pursuant to subsection (a), or person in charge of any of the property of such supplier or other person referred to in clause (A), (B), or (C), is authorized to enter any establishment, ... facility, or other property of such supplier or other person in order to determine whether such supplier or other person has acted or is acting in compliance with this title, including for this purpose, inspection, at reasonable times, of records, files, papers, processes, controls, and facilities, or in order to test any feature of a public water system, including its raw water source. The Administrator or the Comptroller General (or any representative designated by either) shall have access for the purpose of audit and examination to any records, reports, or information of a grantee which are required to be maintained under subsection (a) or which are pertinent to any financial assistance under this title.

KEVIN PHILLIPS / BOB BECKER  
Inspector's Name & Title (Print)

[Signature]  
Inspector's Signature

# Inspection Report For Well: WY20000 - 02141

U.S. Environmental Protection Agency  
Underground Injection Control Program, 8ENF-T  
999 18th Street, Suite 300, Denver, CO 80202-2466  
This form was printed on 10/21/2005

INSPECTOR(S): Lead: Phillips, Kenneth

Date: 10/27/2005

Others: Bowling, Linda

Time: 2:29 am / pm

OPERATOR (only if different):

REPRESENTATIVE(S): J. D. Barguin

## PRE-INSPECTION REVIEW

### Marathon Oil Company

Well Name: Tribal EI-30 Tensleep  
Well Type: Enhanced Recovery (2R)  
Operating Status: AC (ACTIVE) as of 12/31/2002  
Oil Field: Steamboat Butte  
Location: X-300 S-13N R1W  
Indian Country: X, Wind River

U2 Entered

Date: 11/9/05  
Initial: JDB

Last Inspection: 10/19/2004  
Last MIT: Pass 7/13/2005

Allowable Inj Pressure: 1830 /  
Annulus Pressure From Last MIT: 1000

BLACK = POSSIBLE VIOLATION

ONLY = DATA MISSING

INSPECTION TYPE:  
(Select One)

☐ Construction / Workover  
☐ Plugging  
☐ Post-Closure

☐ Response to Complaint  
☒ Routine  
☐ Witness MIT

☐ Other

ICIS Entered

Date: 11/18/05

Initials: JDB

### OBSERVED VALUES:

Tubing Gauge: ☒ Yes  
☐ No

Pressure: U: 1360 / L: \_\_\_\_\_ psig  
Gauge Range: 0 - 3000 psig

Gauge Owner: ☒ EPA  
☐ Operator

Annulus Gauge: ☒ Yes  
☐ No

Pressure: 0 psig  
Gauge Range: 0 - 1000 psig

Gauge Owner: ☒ EPA  
☐ Operator

Bradenhead Gauge: ☐ Yes  
☒ No

Pressure: \_\_\_\_\_ psig  
Gauge Range: \_\_\_\_\_ psig

Gauge Owner: ☐ EPA  
☐ Operator

Pump Gauge: ☒ Yes  
☐ No

Pressure: \_\_\_\_\_ psig  
Gauge Range: \_\_\_\_\_ psig

Gauge Owner: ☐ EPA  
☐ Operator

Operating Status:  
(Select One)  
☒ Active  
☐ Being Reworked

☐ Not Injecting  
☐ Production

☐ Plugged and Abandoned  
☐ Under Construction

See page 2 for photos, comments, and site conditions.

## Inspection Report For Well: WY20000 - 02141 (PAGE 2)

**PHOTOGRAPHS:**

☐ Yes  
☒ No

List of photos taken: \_\_\_\_\_

---

---

---

**Comments and site conditions observed during inspection:** \_\_\_\_\_

---

---

---

---

---


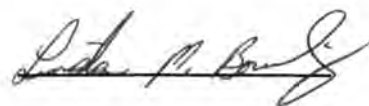
---

---

---

**GPS:** GPS File ID: \_\_\_\_\_

Signature of EPA Inspector(s):

  \_\_\_\_\_

☐ Data Entry

☐ Compliance Staff

☐ Hard Copy Filing



# NOTICE OF INSPECT 1



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION VIII, 999 18TH STREET - SUITE 500  
DENVER, COLORADO 80202-2405

Date: <u>10/25/85</u>	Notice of inspection is hereby given according to Section 1445(b) of the Safe Drinking Water Act (42 U.S.C. §300f et seq.).
Hour: <u>11:00</u>	

Firm Name: MARATHON PRODUCTION CO., INC.

Firm Address: P.O. Box 130  
KINNEBRO WY 82516

## REASON FOR INSPECTION:

For the purpose of inspecting records, files, papers, processes, controls and facilities, and obtaining samples to determine whether the person subject to an applicable underground injection control program has acted or is acting in compliance with the Safe Drinking Water Act and any applicable condition of permit or rule authorization.

## SECTION 1445(b) of the SAFE DRINKING WATER ACT is quoted below:

Section 1445(b)(1): Except as provided in Paragraph (2), the Administrator, or representatives of the Administrator duly designated by him, upon presenting appropriate credentials, and a written notice to any supplier of water or other person subject to (a), or person subject (A) a national primary drinking water regulation prescribed under Section 1412(B) an applicable Underground Injection Control Program, or (C) any requirement to monitor an unregulated contaminant pursuant to subsection (a), or person in charge of any of the property of such supplier or other person referred to in clause (A), (B), or (C), is authorized to enter any establishment, ... facility, or other property of such supplier or other person in order to determine whether such supplier or other person has acted or is acting in compliance with this title, including for this purpose, inspection, at reasonable times, of records, files, papers, processes, controls, and facilities, or in order to test any feature of a public water system, including its raw water source. The Administrator or the Comptroller General (or any representative designated by either) shall have access for the purpose of audit and examination to any records, reports, or information of a grantee which are required to be maintained under subsection (a) or which are pertinent to any financial assistance under this title.

Ken Phillips / Linda Bowling  
Inspector's Name & Title (Print)

[Signature]  
Inspector's Signature



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION 8  
999 18<sup>TH</sup> STREET - SUITE 300  
DENVER, CO 80202-2466  
Phone 800-227-8917  
<http://www.epa.gov/region08>

January 7, 2005

Ref: 8ENF-UFO

Randy Meabon  
Marathon Oil Company  
P.O. Box 2690  
Cody, WY 82414

Re: UNDERGROUND INJECTION CONTROL (UIC)  
Courtesy Reminder to File Annual Injection Well  
Monitoring Report and Fluid Analysis

Dear Mr. Meabon:

This courtesy reminder letter is sent to you reminding you to comply with certain UIC regulatory and permitting requirements. Specifically, I am reminding you to submit your annual monitoring reports (blank copy enclosed). This form is also available on-line at <http://www.epa.gov/safewater/uic/pdfs/7520-11.pdf>. Also, if required in your permit, please remember to submit a chemical analysis representative of injection fluid collected this year. The due date for submission is **February 15, 2005**.

As in years past, this letter is being sent to every operator of a UIC Class II injection well under the jurisdiction of the U.S. EPA Region 8 program. Given possible reduction in resources in the future, this courtesy reminder letter may not be possible, but would not affect your duty to comply with these requirements.

Also enclosed is a recent print out from our database displaying the Marathon Oil Company injection wells to which the reporting requirements in this letter generally apply. There may be additional reporting requirements established in an existing UIC permit. If so, then you must also follow those UIC permit requirements.

**IMPORTANT:** Follow the instructions in this letter when completing the enclosed EPA Annual Disposal/Injection Well Monitoring Report (EPA Form 7520-11).

1. Complete a separate form for **each well**.



2. A form must be submitted for any injection well with an unplugged status at any point during the reporting period (calendar year 2004), including those wells which may have been transferred to or from another company at some point during the reporting period.
3. When completing this form, insert only actual numeric values into the columns, rather than leaving them blank. Do not use marks like "-" or "\*" to substitute for the value zero. A well that has been temporarily abandoned must still be periodically observed and pressure and rate values recorded.
4. All monthly values must be filled in and must be actual observed values. Further, please report the maximum observed injection pressure, not just the average injection pressure, for each month in the reporting period.
5. Each completed form must be signed and dated.
6. Please send each report to the following address:

U.S. Environmental Protection Agency, Region 8  
999 18<sup>th</sup> Street, Suite 300  
Denver, Colorado 80202  
Attention: Nathan Wiser (8ENF-UFO)

If you have any questions about matters raised in this letter, please feel free to contact Nathan Wiser of my staff at (303) 312-6211.

Sincerely,

*Elisabeth Evans*

Elisabeth Evans  
Director  
Technical Enforcement Program

Enclosures: 1. Blank Form 7520-11 (Annual Disposal/Injection Well Monitoring Report)  
2. Print out of injection wells from EPA's UIC database

# Inspection Report For Well: WY20000 - 02141

U.S. Environmental Protection Agency  
Underground Injection Control Program, 8ENF-T  
999 18th Street, Suite 300, Denver, CO 80202-2466

This form was printed on 10/15/2004

INSPECTOR(S): Lead: Phillips, Kenneth

Date: 10/19/2004

Others: Craver, Al

Time: 11:25 am

OPERATOR (only if different): LYNETTE O'NEAL / EVERETT MC GILL

REPRESENTATIVE(S): CHUCK HENRY

## PRE-INSPECTION REVIEW

### Marathon Oil Company

Well Name: Tribal EI-30 Tensleep  
Well Type: Enhanced Recovery (2R)  
Operating Status: ACTIVE (AC) as of 12/31/2002  
Oil Field: Steamboat Butte  
Location: XXXX ST TAN RIV  
Indian Country: X, Wind River

ICIS Entered

Date 10-28-04

Initials AB

Last Inspection: 11/18/2003  
Last MIT: Pass 3/23/2001

Allowable Inj Pressure: 1830 /  
Annulus Pressure From Last MIT: 1000

BLACK = POSSIBLE VIOLATION

Grey = DATA MISSING

### INSPECTION TYPE: (Select One)

☐ Construction / Workover  
☐ Plugging  
☐ Post-Closure

☐ Response to Complaint  
☒ Routine  
☐ Witness MIT

U2 Other Entered

Date 10-27-04

Initial AB

### OBSERVED VALUES:

Tubing Gauge: ☒ Yes  
☐ No

Pressure: U: 1620 / L: \_\_\_\_\_ psig  
Gauge Range: 0-3000 psig

Gauge Owner: ☒ EPA  
☐ Operator

Annulus Gauge: ☒ Yes  
☐ No

Pressure: 0 psig  
Gauge Range: 0-600 psig

Gauge Owner: ☐ EPA  
☒ Operator

Bradenhead Gauge: ☐ Yes  
☒ No

Pressure: \_\_\_\_\_ psig  
Gauge Range: \_\_\_\_\_ psig

Gauge Owner: ☐ EPA  
☐ Operator

Pump Gauge: ☒ Yes  
☐ No

Pressure: \_\_\_\_\_ psig  
Gauge Range: \_\_\_\_\_ psig

Gauge Owner: ☐ EPA  
☐ Operator

Operating Status:  
(Select One) ☒ Active  
☐ Being Reworked

☐ Not Injecting  
☐ Production

☐ Plugged and Abandoned  
☐ Under Construction

See page 2 for photos, comments, and site conditions.

**Inspection Report For Well: WY20000 - 02141 (PAGE 2)**

**PHOTOGRAPHS:**

☐ Yes  
☒ No

List of photos taken: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Comments and site conditions observed during inspection:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**GPS:** GPS File ID: \_\_\_\_\_

Signature of EPA Inspector(s):

 \_\_\_\_\_

☐ Data Entry

☐ Compliance Staff

☐ Hard Copy Filing



# NOTICE OF INSPECTION<sup>NI</sup>



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION VIII, 999 18TH STREET - SUITE 500  
DENVER, COLORADO 80202-2405

Date: 10/19/04

Notice of inspection is hereby given according to Section 1445(b) of the Safe Drinking Water Act (42 U.S.C. §300f et seq.).

Hour: 1000

Firm Name: MARATHON OIL CO.

Firm Address: P.O. Box 130

KINROSS, WY 82516

## REASON FOR INSPECTION:

For the purpose of inspecting records, files, papers, processes, controls and facilities, and obtaining samples to determine whether the person subject to an applicable underground injection control program has acted or is acting in compliance with the Safe Drinking Water Act and any applicable condition of permit or rule authorization.

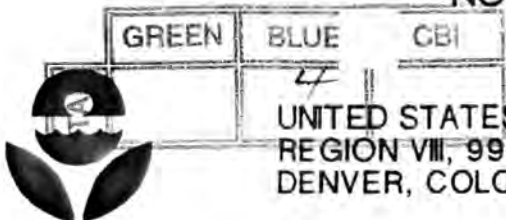
## SECTION 1445(b) of the SAFE DRINKING WATER ACT is quoted below:

Section 1445(b)(1): Except as provided in Paragraph (2), the Administrator, or representatives of the Administrator duly designated by him, upon presenting appropriate credentials, and a written notice to any supplier of water or other person subject to (a), or person subject (A) a national primary drinking water regulation prescribed under Section 1412(B) an applicable Underground Injection Control Program, or (C) any requirement to monitor an unregulated contaminant pursuant to subsection (a), or person in charge of any of the property of such supplier or other person referred to in clause (A), (B), or (C), is authorized to enter any establishment, ... facility, or other property of such supplier or other person in order to determine whether such supplier or other person has acted or is acting in compliance with this title, including for this purpose, inspection, at reasonable times, of records, files, papers, processes, controls, and facilities, or in order to test any feature of a public water system, including its raw water source. The Administrator or the Comptroller General (or any representative designated by either) shall have access for the purpose of audit and examination to any records, reports, or information of a grantee which are required to be maintained under subsection (a) or which are pertinent to any financial assistance under this title.

KENT PHILLIPS/AL CRAVER  
Inspector's Name & Title (Print)

[Signature]  
Inspector's Signature

# NOTICE OF INSPECTION



W2141

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION VIII, 999 18TH STREET - SUITE 500  
DENVER, COLORADO 80202-2405

Date: 11/18/03

Notice of inspection is hereby given according to Section 1445(b) of the Safe Drinking Water Act (42 U.S.C. §300f et seq).

Hour: 9:30

Firm Name: MARATHON OIL COMPANY

Firm Address: 27 HUNNICK SPRINGS RD.

PO. Box 130, KINNEBA WY 82516

## REASON FOR INSPECTION:

For the purpose of inspecting records, files, papers, processes, controls and facilities, and obtaining samples to determine whether the person subject to an applicable underground injection control program has acted or is acting in compliance with the Safe Drinking Water Act and any applicable condition of permit or rule authorization.

## SECTION 1445(b) of the SAFE DRINKING WATER ACT is quoted below:

Section 1445(b)(1): Except as provided in Paragraph (2), the Administrator, or representatives of the Administrator duly designated by him, upon presenting appropriate credentials, and a written notice to any supplier of water or other person subject to (a), or person subject (A) a national primary drinking water regulation prescribed under Section 1412(B) an applicable Underground Injection Control Program, or (C) any requirement to monitor an unregulated contaminant pursuant to subsection (a), or person in charge of any of the property of such supplier or other person referred to in clause (A), (B), or (C), is authorized to enter any establishment, ... facility, or other property of such supplier or other person in order to determine whether such supplier or other person has acted or is acting in compliance with this title, including for this purpose, inspection, at reasonable times, of records, files, papers, processes, controls, and facilities, or in order to test any feature of a public water system, including its raw water source. The Administrator or the Comptroller General (or any representative designated by either) shall have access for the purpose of audit and examination to any records, reports, or information of a grantee which are required to be maintained under subsection (a) or which are pertinent to any financial assistance under this title.

AL Craver  
KEVIN PHILLIPS / AL CRAVER  
Inspector's Name & Title (Print)

[Signature]  
Inspector's Signature

# Inspection Report For Well: WY20000 - 02141

TAB	GREEN	BLUE	CBI
		4	

U.S. Environmental Protection Agency  
Underground Injection Control Program, 8ENF-T  
999 18th Street, Suite 300, Denver, CO 80202-2466  
This form was printed on 11/14/2003

INSPECTOR(S): Lead: Phillips, Kenneth Date: 11/18/2003  
Others: Craver, Al / TRAVIS SHANKS DEARD / LOATEL SINCLAIR Time: 1:45 am / pm  
OPERATOR (only if different):  
REPRESENTATIVE(S): J.T. BRIGGS

PRE-INSPECTION REVIEW	
<b>Marathon Oil Company</b>	
Well Name:	TRIBAL EI-30 Tensleep
Well Type:	Enhanced Recovery (2R)
Operating Status:	ACTIVE (AC) as of 12/31/2002
Oil Field:	Steamboat Butte
Location:	XXXX S 11N R1W
Indian Country:	X, Wind River
Last Inspection:	5/21/2003
Last MIT:	Pass 3/23/2001
U2 Entered	Date 12/14/03
Initial	201
Allowable Inj Pressure:	1830 ✓
Annulus Pressure From Last MIT:	1000

BLACK = POSSIBLE VIOLATION

GREY = DATA MISSING

ICIS Entered

Date 12/18/03  
Initials 201

INSPECTION TYPE: (Select One)

<input type="checkbox"/> Construction / Workover	<input type="checkbox"/> Response to Complaint
<input type="checkbox"/> Plugging	<input checked="" type="checkbox"/> Routine
<input type="checkbox"/> Post-Closure	<input type="checkbox"/> Witness MIT

## OBSERVED VALUES:

Tubing Gauge:	<input checked="" type="checkbox"/> Yes	Pressure: U: 1350: psig	Gauge Owner: <input checked="" type="checkbox"/> EPA
	<input type="checkbox"/> No	Gauge Range: 0-3000 psig	<input type="checkbox"/> Operator
Annulus Gauge:	<input type="checkbox"/> Yes	Pressure: 0 psig	Gauge Owner: <input checked="" type="checkbox"/> EPA
	<input checked="" type="checkbox"/> No	Gauge Range: 0-3000 psig	<input type="checkbox"/> Operator
Bradenhead Gauge:	<input checked="" type="checkbox"/> Yes	Pressure: _____ psig	Gauge Owner: <input type="checkbox"/> EPA
	<input checked="" type="checkbox"/> No	Gauge Range: _____ psig	<input type="checkbox"/> Operator
Pump Gauge:	<input checked="" type="checkbox"/> Yes	Pressure: _____ psig	Gauge Owner: <input type="checkbox"/> EPA
	<input type="checkbox"/> No	Gauge Range: _____ psig	<input type="checkbox"/> Operator
Operating Status: (Select One)	<input checked="" type="checkbox"/> Active	<input type="checkbox"/> Not Injecting	<input type="checkbox"/> Plugged and Abandoned
	<input type="checkbox"/> Being Reworked	<input type="checkbox"/> Production	<input type="checkbox"/> Under Construction

See page 2 for photos, comments, and site conditions.

## Inspection Report For Well: WY20000 - 02141 (PAGE 2)

**PHOTOGRAPHS:**

☐ Yes  
☒ No

List of photos taken: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Comments and site conditions observed during inspection:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**GPS:** GPS File ID: \_\_\_\_\_

Signature of EPA Inspector(s):



☐ Data Entry

☐ Compliance Staff

☐ Hard Copy Filing





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION VIII, 999 18TH STREET - SUITE 500  
DENVER, COLORADO 80202-2405

WY 2141

Date: 5/20/03

Notice of inspection is hereby given according to Section 1445(b) of the Safe Drinking Water Act (42 U.S.C. §300f et seq.).

Hour: 7:55 am

Firm Name: Marathon Oil Company

Steamboat Butte Field

Firm Address: 1501 Stampede, ~~WY~~ Avenue

Circle Ridge Field

Cody, WY 82414-4721

REASON FOR INSPECTION:

For the purpose of inspecting records, files, papers, processes, controls and facilities, and obtaining samples to determine whether the person subject to an applicable underground injection control program has acted or is acting in compliance with the Safe Drinking Water Act and any applicable condition of permit or rule authorization.

SECTION 1445(b) of the SAFE DRINKING WATER ACT is quoted below:

Section 1445(b)(1): Except as provided in Paragraph (2), the Administrator, or representatives of the Administrator duly designated by him, upon presenting appropriate credentials, and a written notice to any supplier of water or other person subject to (a), or person subject (A) a national primary drinking water regulation prescribed under Section 1412(B) an applicable Underground Injection Control Program, or (C) any requirement to monitor an unregulated contaminant pursuant to subsection (a), or person in charge of any of the property of such supplier or other person referred to in clause (A), (B), or (C), is authorized to enter any establishment, ... facility, or other property of such supplier or other person in order to determine whether such supplier or other person has acted or is acting in compliance with this title, including for this purpose, inspection, at reasonable times, of records, files, papers, processes, controls, and facilities, or in order to test any feature of a public water system, including its raw water source. The Administrator or the Comptroller General (or any representative designated by either) shall have access for the purpose of audit and examination to any records, reports, or information of a grantee which are required to be maintained under subsection (a) or which are pertinent to any financial assistance under this title.

Ken Phillips, SEG

Nathan M. Wiser, Environ. Scientist  
Inspector's Name & Title (Print)

Al Craver, SEG

Nathan M. Wiser  
Inspector's Signature



# Inspection Report For Well: WY20000-02141

U.S. Environmental Protection Agency  
Underground Injection Control Program, 8ENF-T  
999 18th Street, Suite 300, Denver, CO 80202-2466

This form was printed on 5/16/2003

INSPECTOR(S): Lead: Nathan Wiser

Date: 5/21/2003

Others: Kenneth Phillips, Nathan Wiser, ~~CATLEWICKS~~ <sup>KASSEL</sup>

Time: 9:50

am/pm

OPERATOR (only if different):

VERLON TIMBANA, CHESTER PINGREE

REPRESENTATIVE(S): CHUCK HENRY

## PRE-INSPECTION REVIEW

Marathon Oil Company (MAR04), Park, WY

U2 Entered

ICIS 6/19/03

Well Name: TRIBAL EI-30 Tensleep

Date 6/4/03

Well Type: Enhanced Recovery (2R)

Initial KAP

Operating Status: ~~Producing~~

Oil Field: Steamboat Butte

Location: ~~COOKS TIE IN~~

Indian Country: Y, Wind River

Last Inspection: [INSP DATE]

Allowable Inj Pressure: 1830 /

Last MIT: [MIT RESULT/DATE]

Annulus Pressure From Last MIT [ANNULUS PRESS]

BLACK = POSSIBLE VIOLATION

INSPECTION TYPE:  
(Select One)

Construction / Workover  
Plugging  
Post-Closure

Response to Complaint  
Routine  
Witness MIT

Other

## OBSERVED VALUES:

Tubing Gauge:	<u>Yes</u>	Pressure: U: 1530/L:	psig	Gauge Owner: <u>EPA</u>
	No	Gauge Range: 0-2000	psig	Operator
Annulus Gauge:	Yes	Pressure: 0	psig	Gauge Owner: <u>EPA</u>
	<u>No</u>	Gauge Range: 0-200	psig	Operator
Bradenhead Gauge:	Yes	Pressure:	psig	Gauge Owner: EPA
	No	Gauge Range:	psig	Operator
Pump Gauge:	Yes	Pressure:	psig	Gauge Owner: EPA
	No	Gauge Range:	psig	Operator
Operating Status: (Select One)	<u>Active</u>	Not Injecting	Plugged and Abandoned	
	Being Reworked	Production	Under Construction	

See page 2 for photos, comments, site conditions, and CATS reporting.

# Inspection Report For Well: WY20000-02141 (PAGE 2)

## PHOTOGRAPHS:

Yes

List of photos taken:

No

Comments and site conditions observed during inspection:

GPS: GPS File ID:

## CATS REPORTING:

Was a multi-media checklist used on this inspection? (MMI3) Yes No

Were other EPA programs involved in this inspection? Yes No

If YES, was this a "coordinated" multi-media inspection? (MMI1) Yes No

was this a "consolidated" multi-media inspection? (MMI2) Yes No

what programs participated?

Was this a State or Tribal "capacity building" activity? Yes No

If YES, who was it provided to?

If YES, what was provided? Training Regulatory determination (oral or written)  
Assisted inspection Response to request for assistance

Other Participants (select as many as applicable):

Tribe Federal Agency State Local Other (contractor)

Was a Violation found? Yes No

If NO, close pipeline? Yes No

If YES, what do you envision your next activity or activities might be?

If YES, when do you envision the above activity occurring?

Projected inspection report completion date:

Actual inspection report completion date:

Signature of EPA Inspector(s):

*Zim Phillips* *Nathan M. White*

Data Entry

Compliance Staff

Hard Copy Filing

# NOTICE OF INSPECTI

W2141



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION VIII, 999 18TH STREET - SUITE 500  
DENVER, COLORADO 80202-2405

Date: 5/14/02

Notice of inspection is hereby given according to Section 1445(b) of the Safe Drinking Water Act (42 U.S.C. §300f et seq.).

Hour: 10:00 AM

Firm Name: MARATHON OR

Firm Address: 27 HAVACK SPRINGS RD.  
KINNEAD WYO 82516

## REASON FOR INSPECTION:

For the purpose of inspecting records, files, papers, processes, controls and facilities, and obtaining samples to determine whether the person subject to an applicable underground injection control program has acted or is acting in compliance with the Safe Drinking Water Act and any applicable condition of permit or rule authorization.

## SECTION 1445(b) of the SAFE DRINKING WATER ACT is quoted below:

Section 1445(b)(1): Except as provided in Paragraph (2), the Administrator, or representatives of the Administrator duly designated by him, upon presenting appropriate credentials, and a written notice to any supplier of water or other person subject to (a), or person subject (A) a national primary drinking water regulation prescribed under Section 1412(B) an applicable Underground Injection Control Program, or (C) any requirement to monitor an unregulated contaminant pursuant to subsection (a), or person in charge of any of the property of such supplier or other person referred to in clause (A), (B), or (C), is authorized to enter any establishment, ... facility, or other property of such supplier or other person in order to determine whether such supplier or other person has acted or is acting in compliance with this title, including for this purpose, inspection, at reasonable times, of records, files, papers, processes, controls, and facilities, or in order to test any feature of a public water system, including its raw water source. The Administrator or the Comptroller General (or any representative designated by either) shall have access for the purpose of audit and examination to any records, reports, or information of a grantee which are required to be maintained under subsection (a) or which are pertinent to any financial assistance under this title.

KEN PHILLIPS

AL CRAVER

Inspector's Name & Title (Print)

[Signature]

Inspector's Signature

# Inspection Report For Well: WY20000-02141

U.S. Environmental Protection Agency  
Underground Injection Control Program, 8ENF-T  
999 18th Street, Suite 300, Denver, CO 80202-2466

This form was printed on 5/2/02

INSPECTOR(S): Lead: KEN PHILLIPS Date: 5/14/2002  
Others: AL CRAVER / LYNN HARRISON Time: 11:25 am / pm  
OPERATOR (only if different): BRODIE NICHOLS / GREG AULTON  
REPRESENTATIVE(S): \_\_\_\_\_

PRE-INSPECTION REVIEW	
Marathon Oil Company (MAR04), UNKNOWN, WY	
Well Name:	TRIBAL EI-30 Tensleep
Well Type:	Enhanced Recovery (2R)
Operating Status:	ACTIVE (AC) as of 3/1/97
Oil Field:	Steamboat Butte
Location:	XXXX SS TEN RIW
Indian Country:	Y, Wind River Joint Environmental of the Wind River Reservation
Compliance Staff:	Wiser, Nathan
Last Inspection:	7/11/00
Allowable Inj Pressure:	UNKNOWN
Last MIT:	Pass 3/23/01
Annulus Pressure From Last MIT:	UNKNOWN

BLACK = POSSIBLE VIOLATION      GREY = DATA MISSING

INSPECTION TYPE: ☒ Compliance ☐ PA ☐ Witness MIT  
(Select One) ☐ Construction ☐ Response to emergency or complaint ☐ Workover  
☐ Enforcement ☐ Routine ☐ Other

## OBSERVED VALUES:

Tubing Gauge:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Pressure: <u>U:1492 H:</u> psig	Gauge Owner: <input checked="" type="checkbox"/> EPA <input type="checkbox"/> Operator
		Gauge Range: <u>0-3000</u> psig	
Annulus Gauge:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Pressure: <u>0</u> psig	Gauge Owner: <input checked="" type="checkbox"/> EPA <input type="checkbox"/> Operator
		Gauge Range: <u>0-1000</u> psig	
Bradenhead Gauge:	<input type="checkbox"/> Yes <input type="checkbox"/> No	Pressure: _____ psig	Gauge Owner: <input type="checkbox"/> EPA <input type="checkbox"/> Operator
		Gauge Range: _____ psig	
Pump Gauge:	<input type="checkbox"/> Yes <input type="checkbox"/> No	Pressure: _____ psig	Gauge Owner: <input type="checkbox"/> EPA <input type="checkbox"/> Operator
		Gauge Range: _____ psig	
Operating Status:	<input checked="" type="checkbox"/> Active <input type="checkbox"/> Not Injecting <input type="checkbox"/> Plugged and Abandoned		
(Select One)	<input type="checkbox"/> Being Reworked <input type="checkbox"/> Production <input type="checkbox"/> Under Construction		

*See page 2 for photos, comments, site conditions, and CATS reporting.*

# Inspection Report For Well: WY20000-02141 (PAGE 2)

## PHOTOGRAPHS:

☐ Yes  
☒ No

List of photos taken: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Comments and site conditions observed during inspection:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

GPS: GPS File ID: W051417C

## CATS REPORTING:

Was a multi-media checklist used on this inspection? (MMI3) ☐ Yes ☒ No

Were other EPA programs involved in this inspection? ☐ Yes ☒ No

If YES, was this a "coordinated" multi-media inspection? (MMI1) ☐ Yes ☒ No

was this a "consolidated" multi-media inspection? (MMI2) ☐ Yes ☒ No

what programs participated? \_\_\_\_\_

Was this a State or Tribal "capacity building" activity? ☒ Yes ☐ No

If YES, who was it provided to? WIND RIVER RES.

If YES, what was provided? ☒ Training ☐ Regulatory determination (oral or written)

☒ Assisted inspection ☐ Response to request for assistance

Other Participants (select as many as applicable):

☒ Tribe ☐ Federal Agency ☐ State ☐ Local ☐ Other (contractor)

Was a Violation found? ☐ Yes ☒ No

If NO, close pipeline? ☐ Yes ☐ No

If YES, what do you envision your next activity or activities might be? \_\_\_\_\_

If YES, when do you envision the above activity occurring? \_\_\_\_\_

Projected inspection report completion date: \_\_\_\_\_

Actual inspection report completion date: \_\_\_\_\_

Signature of EPA Inspector(s):

☐ Data Entry

☐ Compliance Staff

☐ Hard Copy Filing





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8  
999 18<sup>TH</sup> STREET - SUITE 300  
DENVER, CO 80202-2466  
<http://www.epa.gov/region08>

Ref: 8ENF-T

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Mr. Carl Roberts  
Associate Engineer  
Marathon Oil Company  
1501 Stampede Avenue  
Cody, Wyoming 82414-4721

Re: UNDERGROUND INJECTION CONTROL (UIC)  
Permission To Resume Injection  
Tribal E-30 EPA ID# WY2000-02141  
Steamboat Butte Field  
Fremont County, Wyoming

Dear Mr. Roberts:

On March 29, 2001, EPA received information from Marathon on the above referenced well regarding the additional Tensleep formation perforations, along with information on the follow up mechanical integrity test (MIT) conducted on March 23, 2001. A Marathon letter of January 12, 2001 outlined the need for these additional perforations and EPA approved this request. The data submitted shows that the well passed the required MIT. Therefore, pursuant to Title 40 of the Code of Federal Regulations (40 CFR) Section 144.28(f)(3), permission to resume injection is granted.

Under continuous service, the next MIT will be due on or before March 22, 2006. If the well is to be temporarily abandoned (TA'd), EPA should be notified. If the well is abandoned for more than two (2) years, it shall be plugged and abandoned in accordance with UIC regulations unless sufficient reasons are provided by Marathon to extend the TA status.

Failure to comply with UIC regulations found at 40 CFR, Parts 144 and 146 are violations of the Safe Drinking Water Act, 42 U.S.C.300h and subject to enforcement by EPA.

8ENF-T  
NW  
3-30-01

*Consent*  
3/30/01



Printed on Recycled Paper

(2)

If you have any questions concerning this letter, you may contact Al Craver at (303) 312-7821. Also, please direct all correspondence to the attention of Al Craver at Mail Code 8ENF-T.

Sincerely,

Connally E. Mears, Director  
Technical Enforcement Program

cc: Don Aragon, Director  
Environmental Quality  
Wind River Reservation

Richard Burnett  
Shoshone Oil and Gas Commission

US 2000-02141

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
<p>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</p> <p>Print your name and address on the reverse so that we can return the card to you.</p> <p>Attach this card to the back of the mailpiece, or on the front if space permits.</p>		<p>A. Received by (Please Print Clearly) <b>Deb Kousoules</b> B. Date of Delivery <b>4/4/01</b></p>	
<p>Article Addressed to:</p> <p><b>APR 2 2001</b></p> <p>Mr. Carl Roberts, Associate Engineer Marathon Oil Company 1501 Stampede Avenue Cody, Wyoming 82414-4721</p>		<p>C. Signature <b>X Deb Kousoules</b> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p>	
		<p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If YES, enter delivery address below:</p>	
		<p>3. Service Type</p> <p><input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail</p> <p><input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise</p> <p><input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p>	
		<p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>	
<p>Article Number (Copy from service label)</p> <p><b>70060520002390557148</b></p>			
S Form 3811, July 1999		Domestic Return Receipt	
		102595-00-M-0952	

U.S. Postal Service	
CERTIFIED MAIL RECEIPT	
(Domestic Mail Only; No Insurance Coverage Provided)	
<p>Postage \$</p> <p>Certified Fee</p> <p>Return Receipt Fee</p> <p>Res (End)</p> <p>Tot</p>	
<p>Mr. Carl Roberts, Associate Engineer Marathon Oil Company 1501 Stampede Avenue Cody, Wyoming 82414-4721</p>	
<p>Rec. (all)</p> <p>Stres</p> <p>City, State, ZIP+ 4</p>	
<p>PS Form 3800, February 2000</p> <p>See Reverse for Instructions</p>	



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8  
999 18<sup>TH</sup> STREET - SUITE 300  
DENVER, CO 80202-2466  
<http://www.epa.gov/region08>

MAR 30 2001

Ref: 8ENF-T

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Mr. Carl Roberts  
Associate Engineer  
Marathon Oil Company  
1501 Stampede Avenue  
Cody, Wyoming 82414-4721

Re: UNDERGROUND INJECTION CONTROL (UIC)  
Permission To Resume Injection  
Tribal E-30 EPA ID# WY2000-02141  
Steamboat Butte Field  
Fremont County, Wyoming

Dear Mr. Roberts:

On March 29, 2001, EPA received information from Marathon on the above referenced well regarding the additional Tensleep formation perforations, along with information on the follow up mechanical integrity test (MIT) conducted on March 23, 2001. A Marathon letter of January 12, 2001 outlined the need for these additional perforations and EPA approved this request. The data submitted shows that the well passed the required MIT. Therefore, pursuant to Title 40 of the Code of Federal Regulations (40 CFR) Section 144.28(f)(3), permission to resume injection is granted.

Under continuous service, the next MIT will be due on or before March 22, 2006. If the well is to be temporarily abandoned (TA'd), EPA should be notified. If the well is abandoned for more than two (2) years, it shall be plugged and abandoned in accordance with UIC regulations unless sufficient reasons are provided by Marathon to extend the TA status.

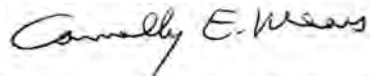
Failure to comply with UIC regulations found at 40 CFR, Parts 144 and 146 are violations of the Safe Drinking Water Act, 42 U.S.C.300h and subject to enforcement by EPA.



(2)

If you have any questions concerning this letter, you may contact Al Craver at (303) 312-7821. Also, please direct all correspondence to the attention of Al Craver at Mail Code 8ENF-T.

Sincerely,

A handwritten signature in cursive script that reads "Connally E. Mears".

Connally E. Mears, Director  
Technical Enforcement Program

cc: Don Aragon, Director  
Environmental Quality  
Wind River Reservation

Richard Burnett  
Shoshone Oil and Gas Commission



# Fax

Fax'd  
3/30/01

**Name:** Carl Roberts

**Organization:** Marathon Oil Company

**Fax:** 307-527-2139

**Phone:**

**From:** Al Craver

**Date:** March, 30 2001

**Subject:** Notice of Noncompliance

**Pages:** 3



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8  
999 18<sup>TH</sup> STREET - SUITE 300  
DENVER, CO 80202-2466  
<http://www.epa.gov/region08>

JAN 23 2001

Ref: 8ENF-T

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Mr. Carl Roberts  
Assoc. Engineer  
Marathon Oil Company  
1501 Stampede Avenue  
Cody, Wyoming 82414-4721

Re: UNDERGROUND INJECTION CONTROL (UIC)  
Proposed Workover - Additional Perforations  
Tribal E-30 (EPA #WY2000-02141) and  
Tribal C-30X (EPA #WY2000-02143)  
Steamboat Butte Field  
Fremont County, Wyoming

Dear Mr. Roberts:

In response to your letter of January 12, 2001, in which you proposed that the perforated intervals in the Tensleep injection zones be extended in the two wells referenced above, please be advised that the procedure has been approved by the Environmental Protection Agency (EPA). You indicate this is necessary because it will result in the recovery of additional reserves from offsetting wells.

The newly recalculated maximum authorized surface injection pressure (MAIP) for each of the two wells is as follows:

<u>Well Name</u>	<u>EPA ID#</u>	<u>Top Perf. Depth</u>	<u>MAIP</u>
Tribal E-30	WY2000-2141	6908 Feet	1830 psi ✓
Tribal C-30X	Wy2000-2143	6924 Feet	1835 psi ✓

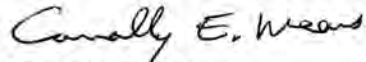
Following the workover operations, each well must pass a mechanical integrity test (MIT) prior to resuming injection. Enclosed you will find a well rework form (EPA Form 7520-12) and MIT form which are to be submitted to this office within thirty (30) days of completion of the workovers.



Printed on Recycled Paper

If you have any questions or comments concerning this letter, you may contact Al Craver at (303) 312-7821. Also, please direct all correspondence to the attention of Al Craver at Mail Code 8ENF-T.

Sincerely,



Connally E. Mears  
Technical Enforcement Program

Enclosures: MIT Form and Well Rework Form (7520-12)

cc: Don Aragon, Director  
Environmental Quality  
Wind River Indian Reservation

Richard Burnett  
Shoshone Oil and Gas Commission



## WELL REWORK RECORD

NAME AND ADDRESS OF PERMITTEE

NAME AND ADDRESS OF CONTRACTOR

LOCATE WELL AND OUTLINE UNIT ON  
SECTION PLAT — 640 ACRES

STATE

COUNTY

PERMIT NUMBER

SURFACE LOCATION DESCRIPTION

¼ OF

¼ OF

¼ SECTION

TOWNSHIP

RANGE

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface

Location \_\_\_\_ ft. from (N/S) \_\_\_\_ Line of quarter section

and \_\_\_\_ ft. from (E/W) \_\_\_\_ Line of quarter section

WELL ACTIVITY

- ☐ Brine Disposal  
☐ Enhanced Recovery  
☐ Hydrocarbon Storage

Lease Name

Total Depth Before Rework

Total Depth After Rework

Date Rework Commenced

Date Rework Completed

TYPE OF PERMIT

- ☐ Individual  
☐ Area  
Number of Wells \_\_\_\_

Well Number

### WELL CASING RECORD — BEFORE REWORK

Casing		Cement		Perforations		Acid or Fracture Treatment Record
Size	Depth	Sacks	Type	From	To	

### WELL CASING RECORD — AFTER REWORK (Indicate Additions and Changes Only)

Casing		Cement		Perforations		Acid or Fracture Treatment Record
Size	Depth	Sacks	Type	From	To	

DESCRIBE REWORK OPERATIONS IN DETAIL  
USE ADDITIONAL SHEETS IF NECESSARY

WIRE LINE LOGS, LIST EACH TYPE

Log Types

Logged Intervals

### CERTIFICATION

*I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32).*

NAME AND OFFICIAL TITLE (Please type or print)

SIGNATURE

DATE SIGNED



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8  
999 18<sup>TH</sup> STREET - SUITE 300  
DENVER, CO 80202-2466  
<http://www.epa.gov/region08>

Ref: 8ENF-T

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Mr. Carl Roberts  
Assoc. Engineer  
Marathon Oil Company  
1501 Stampede Avenue  
Cody, Wyoming 82414-4721

Re: UNDERGROUND INJECTION CONTROL (UIC)  
Proposed Workover - Additional Perforations  
Tribal E-30 (EPA #WY2000-02141) and  
Tribal C-30X (EPA #WY2000-02143)  
Steamboat Butte Field  
Fremont County, Wyoming

Dear Mr. Roberts:

In response to your letter of January 12, 2001, in which you proposed that the perforated intervals in the Tensleep injection zones be extended in the two wells referenced above, please be advised that the procedure has been approved by the Environmental Protection Agency (EPA). You indicate this is necessary because it will result in the recovery of additional reserves from offsetting wells.

The newly recalculated maximum authorized surface injection pressure (MAIP) for each of the two wells is as follows:

<u>Well Name</u>	<u>EPA ID#</u>	<u>Top Perf. Depth</u>	<u>MAIP</u>
Tribal E-30	WY2000-2141	6908 Feet	1830 psi
Tribal C-30X	Wy2000-2143	6924 Feet	1835 psi

Following the workover operations, each well must pass a mechanical integrity test (MIT) prior to resuming injection. Enclosed you will find well a rework form (EPA Form 7520-12) and MIT form which are to be submitted to this office within thirty (30) days of completion of the workovers.

8ENFT  
1-22-01  
JB

8ENFT  
NW  
1-22-01

Concurrence  
1/22/01  
w/ concurrence



Printed on Recycled Paper





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8  
999 18<sup>TH</sup> STREET - SUITE 300  
DENVER, CO 80202-2466  
<http://www.epa.gov/region08>

Ref: 8ENF-T

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Mr. Carl Roberts  
Assoc. Engineer  
Marathon Oil Company  
1501 Stampede Avenue  
Cody, Wyoming 82414-4721

Re: UNDERGROUND INJECTION CONTROL (UIC)  
Proposed Workover - Additional Perforations  
Tribal E-30 (EPA #WY2000-02141) and  
Tribal C-30X (EPA #WY2000-02143)  
Steamboat Butte Field  
Fremont County, Wyoming

Dear Mr. Roberts:

In response to your letter of January 12, 2001, in which you proposed that the perforated intervals in the Tensleep injection zones be extended in the two wells referenced above, please be advised that the procedure has been approved by the Environmental Protection Agency (EPA). You indicate this is necessary because it will result in the recovery of additional reserves from offsetting wells.

The newly recalculated maximum authorized surface injection pressure (MAIP) for each of the two wells is as follows:

<u>Well Name</u>	<u>EPA ID#</u>	<u>Top Perf. Depth</u>	<u>MAIP</u>
Tribal E-30	WY2000-2141	6908 Feet	1830 psi
Tribal C-30X	Wy2000-2143	6924 Feet	1835 psi

Following the workover operations, each well must pass a mechanical integrity test (MIT) prior to resuming injection. Enclosed you will find a well rework form (EPA Form 7520-12) and MIT form which are to be submitted to this office within thirty (30) days of completion of the workovers.



Printed on Recycled Paper

If you have any questions or comments concerning this letter, you may contact Al Craver at (303) 312-7821. Also, please direct all correspondence to the attention of Al Craver at Mail Code 8ENF-T.

Sincerely,

Connally E. Mears  
Technical Enforcement Program

Enclosures: MIT Form and Well Rework Form (7520-12)

cc: Don Aragon, Director  
Environmental Quality  
Wind River Indian Reservation

Richard Burnett  
Shoshone Oil and Gas Commission

W 2000-02141

U.S. Postal Service CERTIFIED MAIL RECEIPT (Domestic Mail Only; No Insurance Coverage Provided)		
<div style="float: left; width: 150px; text-align: right;">           7000 0520 0022 9549 1257         </div> <div style="clear: both;"></div>		
Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Tot	Mr. Carl Roberts Assoc. Engineer	
Reci	Marathon Oil Company	
Street	1501 Stampede Avenue	
City, St.	Cody, WY 82414-4721	
PS Form 3800, February 2000		
See Reverse for Instructions		

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY												
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	<table border="1"> <tr> <td>A. Received by (Please Print Clearly)</td> <td>B. Date of Delivery</td> </tr> <tr> <td><i>Deb Kousoulos</i></td> <td><i>1-29-01</i></td> </tr> <tr> <td>C. Signature</td> <td> <input checked="" type="checkbox"/> Agent  <input type="checkbox"/> Addressee         </td> </tr> <tr> <td><i>Deb Kousoulos</i></td> <td></td> </tr> <tr> <td>D. Is delivery address different from item 1?</td> <td> <input type="checkbox"/> Yes  <input checked="" type="checkbox"/> No         </td> </tr> <tr> <td colspan="2">If YES, enter delivery address below:</td> </tr> </table>	A. Received by (Please Print Clearly)	B. Date of Delivery	<i>Deb Kousoulos</i>	<i>1-29-01</i>	C. Signature	<input checked="" type="checkbox"/> Agent <input type="checkbox"/> Addressee	<i>Deb Kousoulos</i>		D. Is delivery address different from item 1?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, enter delivery address below:	
A. Received by (Please Print Clearly)	B. Date of Delivery												
<i>Deb Kousoulos</i>	<i>1-29-01</i>												
C. Signature	<input checked="" type="checkbox"/> Agent <input type="checkbox"/> Addressee												
<i>Deb Kousoulos</i>													
D. Is delivery address different from item 1?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No												
If YES, enter delivery address below:													
1. Article Addressed to: <i>JAN 24 2001</i>  Mr. Carl Roberts Assoc. Engineer Marathon Oil Company 1501 Stampede Avenue Cody, WY 82414-4721	3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.												
2. Article Number (Copy from service label) <i>70000520002595491257</i>	4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes												
PS Form 3811, July 1999    Domestic Return Receipt    102595-00-M-0952													



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8  
999 18<sup>TH</sup> STREET - SUITE 300  
DENVER, CO 80202-2466

AUG 30 2000

Ref: 8ENF-T

*concurrent*

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Mr. C.R. Adams  
Marathon Oil Company  
1501 Stampede Avenue  
Cody, WY 82414-4721

RE: UNDERGROUND INJECTION CONTROL (UIC)  
Permission to Inject  
Tribal E-30 (EPA No. WY2000-02141)  
Steamboat Butte Field  
Fremont County, WY

Dear Mr. Adams:

We received your letter of December 13, 1999 including the Mechanical Integrity Test (MIT) performed successfully at 1000 psi, for the Tribal E-30 (EPA No. WY2000-02141) in the Steamboat Butte Field.

The results of the MIT and the Well Rework Record (EPA Form 7520-12) were reviewed. The permission to begin water injection into this well was granted by e-mail on December 14, 1999. This letter confirms the authorization in writing.

Under continuous service, the next MIT will be due on or before December 7, 2004. If the well is to be temporarily abandoned, EPA should be notified. If the well is abandoned for more than two (2) years, the well shall be plugged and abandoned in accordance with UIC regulations unless sufficient reasons are provided by Marathon Oil Company to extend the Temporarily Abandoned status.

Failure to comply with UIC regulations found at Title 40 of the Code of Federal Regulations Parts 144 and 146 are violations of the Safe Drinking Water Act, 42 U.S.C. §300h and subject to enforcement by EPA.

8 ENF-T  
8-24-00  
AB

8 ENF-T  
NW  
8-24-00

an  
8/24  
w/ a + correction  
2  
an  
8/29



If you have any questions or comments concerning this letter, you may contact Al Craver at (303) 312-7821. Also, please direct all correspondence to the attention of Al Craver at Mail Code 8ENF-T.

Sincerely,

Connally E. Mears, Director  
Technical Enforcement Program

cc: Don Aragon, Director  
Environmental Quality  
Wind River Indian Reservation

Richard Burnett  
Shoshone Oil & Gas Commission

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

AUG 30 2000

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

**3. Article Addressed to:**

MR CR ADAMS  
MARATHON OIL CO  
1501 STAMPEDE AVE  
CODY WY 82414-4721

**4a. Article Number**

2 152 740 988

**4b. Service Type**

- ☐ Registered ☒ Certified  
☐ Express Mail ☐ Insured  
☐ Return Receipt for Merchandise ☐ COD

**7. Date of Delivery**

9-1-00

**5. Received By: (Print Name)**

Robert E. Karlbauer

**6. Signature: (Addressee or Agent)**

X Robert E. Karlbauer

**8. Addressee's Address (Only if requested and fee is paid)**

PS Form 3811, December 1994

102595-97-B-0179

Domestic Return Receipt

Z 152 740 988

US Postal Service

**Receipt for Certified Mail**

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

MR CR ADAMS MARATHON OIL CO 1501 STAMPEDE AVE CODY WY 82414-4721	
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date UIC Permission to Inject Tribal E-30 (EPA 106.WY 2000-02141) Steamboat Butte Field Fremont County, WY	

PS Form 3800, April 1995

AUG 30 2000





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8  
999 18<sup>TH</sup> STREET - SUITE 300  
DENVER, CO 80202-2466  
AUG 30 2000

Ref: 8ENF-T

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Mr. C.R. Adams  
Marathon Oil Company  
1501 Stampede Avenue  
Cody, WY 82414-4721

**CONCURRENCE/READING FILE**

**CERTIFIED MAIL TRACKING #**

2152 740 988

RE: UNDERGROUND INJECTION CONTROL (UIC)  
Permission to Inject  
Tribal E-30 (EPA No. WY2000-02141)  
Steamboat Butte Field  
Fremont County, WY

Dear Mr. Adams:

We received your letter of December 13, 1999 including the Mechanical Integrity Test (MIT) performed successfully at 1000 psi, for the Tribal E-30 (EPA No. WY2000-02141) in the Steamboat Butte Field.

The results of the MIT and the Well Rework Record (EPA Form 7520-12) were reviewed. The permission to begin water injection into this well was granted by e-mail on December 14, 1999. This letter confirms the authorization in writing.

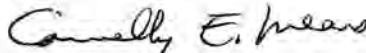
Under continuous service, the next MIT will be due on or before December 7, 2004. If the well is to be temporarily abandoned, EPA should be notified. If the well is abandoned for more than two (2) years, the well shall be plugged and abandoned in accordance with UIC regulations unless sufficient reasons are provided by Marathon Oil Company to extend the Temporarily Abandoned status.

Failure to comply with UIC regulations found at Title 40 of the Code of Federal Regulations Parts 144 and 146 are violations of the Safe Drinking Water Act, 42 U.S.C. §300h and subject to enforcement by EPA.



If you have any questions or comments concerning this letter, you may contact Al Craver at (303) 312-7821. Also, please direct all correspondence to the attention of Al Craver at Mail Code 8ENF-T.

Sincerely,



Connally E. Mears, Director  
Technical Enforcement Program

cc: Don Aragon, Director  
Environmental Quality  
Wind River Indian Reservation

Richard Burnett  
Shoshone Oil & Gas Commission

# Inspection Report for Well WY2000-02141

UNDERGROUND INJECTION CONTROL PROGRAM: Region VIII DIRECT IMPLEMENTATION

This form was printed on 06/19/2000.

INSPECTOR(S): WISER/CRAVER Phillips Date 07/11/00 Time 1:20 am/pm

OPERATOR Marathon REPRESENTATIVE Charles Adams Chuck Henry  
Jon Salmons

**Marathon Oil Company, Cody, WY**

EI-30

STEAMBOAT BUTTE

Indian? Yes, Wind River

Op ID MAR04

2R AC as of 03/01/1997

05 03N 01W SW/NE

Compliance staff: CARSON

## PRE-INSPECTION REVIEW

Last inspection: 06/15/1999

Last MIT: Passed 12/08/1999

Inj Pressure  
Reported 0  
Allowable 1860

Wellhead equipment

INSPECTION TYPE ☒ Routine ☐ PA ☐ Compliance ☐ Construction  
☐ Workover ☐ Enforcement ☐ Response to emergency or complaint ☐ Other

## OBSERVED VALUES

Inj Pressure at wellhead 1560 psig Gauge range 0-3000 psig  
Inj Pressure at pump \_\_\_\_\_ psig Gauge range \_\_\_\_\_ psig  
Annulus Pressure 28 psig Gauge range 0-400 psig  
Pressure Gauge Present ☐ Yes ☐ No

Injection Rate 1 855 BWPD Cumulative Volume 31217  
Flow Meter Present ☒ Yes ☐ No Located at ☒ WELL ☐ PUMP  
Meter Type Halliburton MC-II

☐ Non-resettable ☒ Resettable ☐ Rate Indicator ☐ Other

Operating Status ☒ Active ☐ TA ☐ PA ☐ Shut in ☐ Under Construction

PHOTOGRAPHS? ☒ Yes ☐ No How the negatives are numbered: \_\_\_\_\_


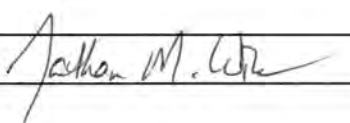
1- #7 inj. tubing press.  
1- #8 ann. pressure

See back of page for comments, site conditions, and compliance followup.

## UIC Inspection

Comments and site conditions observed during inspection: \_\_\_\_\_

Signature of EPA Inspector(s)

### OFFICE USE ONLY - COMPLIANCE FOLLOWUP

Observed Inj Pressure/Rate/Volume Within Allowed Limits Yes ☐ No ☐

Acceptable fittings at site Yes ☐ No ☐

Transfer of ownership? ☐ Yes ☐ No OLD \_\_\_\_\_ NEW \_\_\_\_\_

Change in operating status (computer update) ☐ Yes \_\_\_\_\_ ☐ No

Possible violation ☐ Yes ☐ No - Followup Initiated ☐ Yes ☐ No

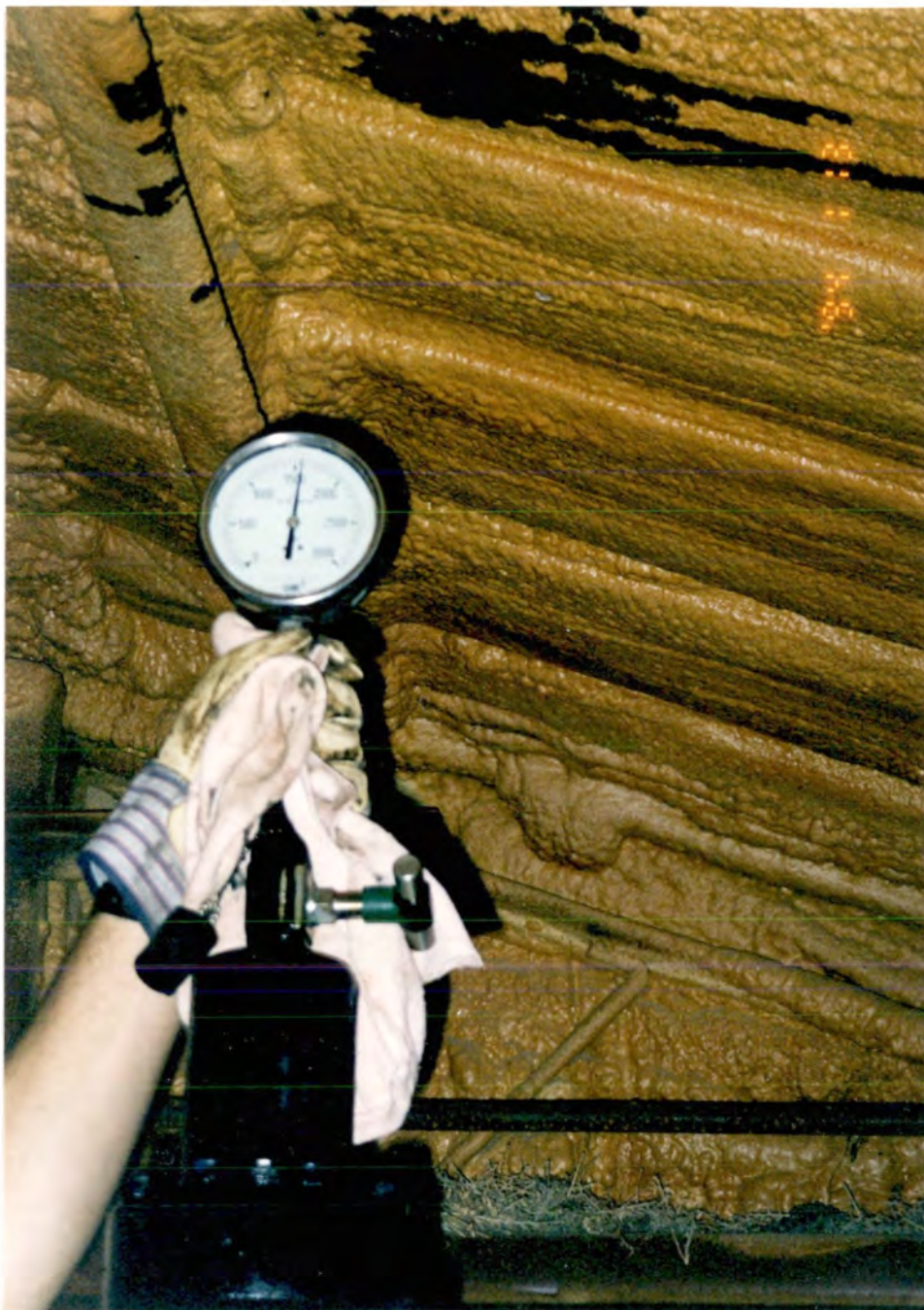
☐ Data Entry

☐ Compliance Staff

☐ 2nd Data Entry

☐ Hard Copy Filing





**OFFICIAL PHOTOGRAPH  
REGION VIII, U.S. ENVIRONMENTAL PROTECTION AGENCY**

\*\*\*\*\*

FACILITY NAME/WELL NAME/NUMBER: Marathon WY 2000-02141

SUBJECT/DESCRIPTION: tubing Pressure

LOCATION: SW NE 5 3N 1W

CITY: COUNTY: Fremont STATE: WY

DATE: 7/11/00 TIME: 1:20 PM

WEATHER: (SUN) (HAZE) (CLOUDY) (RAIN) (SNOW) (OTHER)

CAMERA: Pentax FILM: Kodak TYPE:Daylight ASA: 100 T: 1/ f:

NEGATIVE LOCATION: FILE #:

PROCESSED BY: Foto Fast

PHOTO #: 7 of R1





**OFFICIAL PHOTOGRAPH**  
**REGION VIII, U.S. ENVIRONMENTAL PROTECTION AGENCY**

\*\*\*\*\*

FACILITY NAME/WELL NAME/NUMBER: Marathon WY 2000-02141

SUBJECT/DESCRIPTION: Annulus Pressure

LOCATION: SW NE 5 3N 1W

CITY: COUNTY: Fremont STATE: WY

DATE: 7/11/00 TIME: 1:20 PM

WEATHER: (SUN) (HAZE) (CLOUDY) (RAIN) (SNOW) (OTHER)

CAMERA: Pentax FILM: Kodak TYPE: Daylight ASA: 100 T: 1/ f:

NEGATIVE LOCATION: FILE #:

PROCESSED BY: Foto Fast

PHOTO #: 8 of R1

# Inspection Report for Well WY2000-02141

UNDERGROUND INJECTION CONTROL PROGRAM: Region VIII DIRECT IMPLEMENTATION

This form was printed on 05/18/1999.

INSPECTOR(S): Ken Phillips / Carol Lee Bowden Date 6/15/99 Time 10:30 am/pm

OPERATOR SAME REPRESENTATIVE CHUCK HENRY

Marathon Oil Company, Cody, WY

EI-30

STEAMBOAT BUTTE

Op ID MAR04

2R AC as of 03/01/1997

05 03N 01W

Indian? Yes, Wind River

Compliance staff: CARSON

## PRE-INSPECTION REVIEW

Last inspection: 08/20/1998

Last MIT: Passed 10/21/1993

Inj Pressure  
Reported 1810  
Allowable 1860

Wellhead equipment \_\_\_\_\_

INSPECTION TYPE ☐ Routine ☐ PA ☒ Compliance ☐ Construction  
☐ Workover ☐ Enforcement ☐ Response to emergency or complaint ☐ Other

## OBSERVED VALUES

Inj Pressure at wellhead 1640 psig Gauge range 0-3000 (CO) psig

Inj Pressure at pump \_\_\_\_\_ psig Gauge range \_\_\_\_\_ psig

Annulus Pressure 100 <sup>KAP</sup> 0-3000 (CO) psig Gauge range 0-3000 (CO) psig

Pressure Gauge Present ☒ Yes ☐ No \_\_\_\_\_

Injection Rate 1179.3 BWPD Cumulative Volume 16,300

Flow Meter Present ☒ Yes ☐ No Located at ☒ WELL ☐ PUMP

Meter Type HALLOWAY MC-TT

☐ Non-resettable ☒ Resettable ☐ Rate Indicator ☐ Other

Operating Status ☒ Active ☐ TA ☐ PA ☐ Shut in ☐ Under Construction

PHOTOGRAPHS? ☒ Yes ☐ No How the negatives are numbered: \_\_\_\_\_

PHOTO 6-ROLL 1 - INJECTION PRESS GAUGE

7-ROLL 1 - ANNULAR PRESSURE GAUGE

See back of page for comments, site conditions, and compliance followup.

## UIC Inspection

Comments and site conditions observed during inspection: \_\_\_\_\_

Signature of EPA Inspector(s)

*Judy Beneger - Wilson / Carol Ann Boudier*

### OFFICE USE ONLY - COMPLIANCE FOLLOWUP

Observed Inj Pressure/Rate/Volume Within Allowed Limits Yes ☐ No ☐  
Acceptable fittings at site Yes ☐ No ☐

Transfer of ownership? ☐ Yes ☐ No OLD \_\_\_\_\_ NEW \_\_\_\_\_

Change in operating status (computer update) ☐ Yes \_\_\_\_\_ ☐ No

Possible violation ☐ Yes ☐ No - Followup Initiated ☐ Yes ☐ No

☐ Data Entry

☐ Compliance Staff

☐ 2nd Data Entry

☐ Hard Copy Filing





**OFFICIAL PHOTOGRAPH  
REGION VIII, U.S. ENVIRONMENTAL PROTECTION AGENCY**

\*\*\*\*\*

PROJECT/CASE: Marathon Oil Co.

SUBJECT/DESCRIPTION: Injection Pressure Gauge

CITY: Cody COUNTY: Fremont STATE: WY

DATE: 6/15/99 TIME: 10:30 a.m.

WEATHER: (SUN) (HAZE) (CLOUDY) (RAIN) (SNOW) (OTHER)

CAMERA: Pentax FILM: Kodak TYPE: Daylight ASA: 100 T: 1/ f:

NEGATIVE LOCATION: FILE #:

PROCESSED BY: Foto Fast

PHOTO #: 6 OF: Roll 1



**OFFICIAL PHOTOGRAPH  
REGION VIII, U.S. ENVIRONMENTAL PROTECTION AGENCY**

\*\*\*\*\*

PROJECT/CASE: Marathon Oil Co.

SUBJECT/DESCRIPTION: Annular Pressure Gauge

CITY: Cody COUNTY: Fremont STATE: WY

DATE: 6/15/99 TIME: 10:30 a.m.

WEATHER: (SUN) (HAZE) (CLOUDY) (RAIN) (SNOW) (OTHER)

CAMERA: Pentax FILM: Kodak TYPE: Daylight ASA: 100 T: 1/ f:

NEGATIVE LOCATION: FILE #:

PROCESSED BY: Foto Fast

PHOTO #: 7 OF: Roll 1



**Inspection Report for Well WY2000-02141**  
UNDERGROUND INJECTION CONTROL PROGRAM: Region VIII DIRECT IMPLEMENTATION  
This form was printed on 08/13/1998.

INSPECTOR(S): Carol Bowden & Barbara Conklin Date 8/20/98 Time 10:12 am/pm

OPERATOR Marathon REPRESENTATIVE Woody Sandlin

**Marathon Oil Company, Cody, WY**

EI-30

STEAMBOAT BUTTE

Op ID MAR04

2R AC as of 03/01/1997

05 03N 01W

Indian? Yes, Wind River

Compliance staff: CARSON

**PRE-INSPECTION REVIEW**

Last inspection: 05/22/1997

Last MIT: Passed 10/21/1993

	Inj Pressure
Reported	1780
Allowable	1860

*Wrote NCL 10/2/98 to do 5-yr MIT*  
*JAC*

Wellhead equipment \_\_\_\_\_

INSPECTION TYPE    ☒ Routine    ☐ PA    ☐ Compliance    ☐ Construction  
☐ Workover    ☐ Enforcement    ☐ Response to emergency or complaint    ☐ Other

**OBSERVED VALUES**

Inj Pressure at wellhead 1800 psig    Gauge range 0-3000 psig

Inj Pressure at pump \_\_\_\_\_ psig    Gauge range \_\_\_\_\_ psig

Annulus Pressure 0 psig    Gauge range 0-3000 psig

Pressure Gauge Present    ☒ Yes    ☐ No \_\_\_\_\_

Injection Rate 1503.8 BWPD    Cumulative Volume 27453

Flow Meter Present ☒ Yes    ☐ No    Located at    ☒ WELL    ☐ PUMP

Meter Type Halliburton MC-II

☐ Non-resettable    ☒ Resettable    ☐ Rate Indicator    ☐ Other

Operating Status    ☒ Active    ☐ TA    ☐ PA    ☐ Shut in    ☐ Under Construction

PHOTOGRAPHS?    ☐ Yes    ☒ No    How the negatives are numbered: \_\_\_\_\_

**REVIEWED**

BY: JAC

DATE: 10/27/98

*See back of page for comments, site conditions, and compliance followup.*

## UIC Inspection

Comments and site conditions observed during inspection: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Signature of EPA Inspector(s) Carol Lee Bowden + Barbara C. Allen

### OFFICE USE ONLY - COMPLIANCE FOLLOWUP

Observed Inj Pressure/Rate/Volume Within Allowed Limits Yes ☐ No ☐

Acceptable fittings at site Yes ☐ No ☐

Transfer of ownership? ☐ Yes ☐ No OLD \_\_\_\_\_ NEW \_\_\_\_\_

Change in operating status (computer update) ☐ Yes \_\_\_\_\_ ☐ No

Possible violation ☐ Yes ☐ No - Followup Initiated ☐ Yes ☐ No

☐ Data Entry

☐ Compliance Staff

☐ 2nd Data Entry

☐ Hard Copy Filing







United States Environmental Protection Agency



## ANNUAL CLASS II DISPOSAL/INJECTION WELL MONITORING REPORT

Name, Address, Phone and/or Email of Permittee

Merit Energy Company  
13727 Noel Rd. Suite 1200, Dallas, TX 75240  
Kevin.Schmidt@meritenergy.com  
972-628-1694

State

WY

County

Fremont

## WELL TYPE

- ☐ Brine Disposal  
☒ Enhanced Recovery  
☐ Hydrocarbon Storage

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

SW 1/4 of NE 1/4 of Section 5 Township 3N Range 1W

ft. from (N/S) Line of quarter section

ft. from (E/W) Line of quarter section.

Latitude

Longitude

Permit or EPA ID Number wy20000-02141

API Number 49-013-21402

Full Well Name Tribal E 30-T

MONTH, YEAR	INJECTION PRESSURE MAXIMUM PSIG	TOTAL VOLUME INJECTED BBL	MCF	TUBING -- CASING ANNULUS PRESSURE (IF SPECIFIED IN PERMIT)
				MAXIMUM PSIG
January-2019	1,020	45,623	0	0
February-2019	1,000	41,511	0	0
March-2019	960	44,205	0	0
April-2019	1,000	42,182	0	0
May-2019	1,000	45,167	0	0
June-2019	1,020	45,696	0	0
July-2019	1,200	47,255	0	0
August-2019	1,220	48,155	0	0
September-2019	1,200	47,325	0	0
October-2019	1,200	49,050	0	0
November-2019	1,200	47,400	0	0
December-2019	1,160	49,577	0	0

## Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title (Please type or print)

Kevin Schmidt  
Regulatory Analyst

Signature

Date Signed

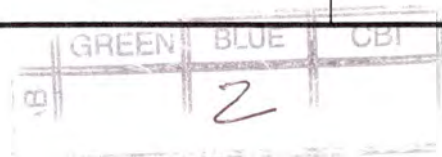
01/15/20

Date

1/31/20

Initial

DS



## INSTRUCTIONS FOR FORM 7520-11

Owners or operators of Class II injection wells should use this form to submit required monitoring data annually. Owners or operators of all other well classes should use Form 7520-8. Please submit a separate form for each well.

**NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE:** Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

Check the appropriate box to describe the **WELL TYPE**.

**WELL LOCATION:** Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

**PERMIT OR EPA ID NUMBER:** Enter the well identification number or permit number assigned to the injection well by the EPA or the permitting authority.

**API NUMBER:** Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

**FULL WELL NAME:** Enter the full name of the well or project.

Enter on a separate row, each month and year for which monitoring results are reported. Provide the following information:

**MAXIMUM INJECTION PRESSURE**, in pounds per square inch gauge (psig); **TOTAL VOLUME INJECTED** in barrels (bbl) or millions of cubic feet (mcf); and **MAXIMUM TUBING-CASING ANNULUS PRESSURE** (if specified in the permit) in psig.

**CERTIFICATION:** This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

**PAPERWORK REDUCTION ACT NOTICE:** The public reporting and recordkeeping burden for this collection of information is estimated to average 29.7 hours per response. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources, complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.



## Complete Water Analysis Report

Customer: **MERIT ENERGY CO**  
 Region: **Steamboat Butte Field**  
 Location: **Northwest WY**  
 System: **Production System**

Equipment: **C-1 Injection**  
 Sample Point: **Wellhead**  
 Sample ID: **AO19545**  
 Acct Rep Email: **dustin.mclean@ecolab.com**

Collection Date: **12/11/2019**  
 Receive Date: **12/23/2019**  
 Report Date: **12/31/2019**  
 Location Code: **32827**

### Field Analysis

Bicarbonate	122 mg/L	Carbonate	Not Detected mg/L	Dissolved CO2	110 mg/L
Dissolved H2S	59 mg/L	Pressure Surface	1075 psi	Temperature	120 ° F
pH of Water	6.8				

### Sample Analysis

Conductivity (Calculated)	3036 µS - cm3	Ionic Strength	0.05	Resistivity	3.293 ohms - m
Specific Gravity	1.004	Total Dissolved Solids	2021 mg/L		

### Cations

Iron	<0.100 mg/L	Manganese	<0.050 mg/L	Barium	<0.050 mg/L
Strontium	9.25 mg/L	Calcium	296 mg/L	Magnesium	56 mg/L
Sodium	1300.00 mg/L	Potassium	77.1 mg/L	Copper	<0.050 mg/L
Zinc	0.139 mg/L	Lead	<0.200 mg/L	Aluminum	<0.300 mg/L
Phosphorus	0.246 mg/L				

### Anions

Chloride	61 mg/L	Sulfate	99 mg/L
----------	---------	---------	---------

### Scale Type

Anhydrite CaSO4 PTB	N/A	Anhydrite CaSO4 SI	-2.04
Barite BaSO4 PTB	N/A	Barite BaSO4 SI	N/A
Calcite CaCO3 PTB	3.3	Calcite CaCO3 SI	0.05
Celestite SrSO4 PTB	N/A	Celestite SrSO4 SI	-1.25
Gypsum CaSO4 PTB	N/A	Gypsum CaSO4 SI	-2.04
Hemihydrate CaSO4 PTB	N/A	Hemihydrate CaSO4 SI	-1.83

### Comments

Scaling predictions calculated using Oddo-Tomson model

This document contains the confidential and/or proprietary information of Nalco Champion. The recipient agrees to maintain the confidentiality of the terms of this document, and shall not reproduce it by any means, disclose the contents of it to any third party, or use the contents of it for any purpose other than the purpose for which it was intended by Nalco Champion.



MERIT ENERGY COMPANY

	GREEN	BLUE	CBI
TAB		2	

13727 Noel Road · Suite 1200 · Dallas, Texas 75240  
Ph 972.701.8377 · Fx 972.960.1252 · [www.meritenergy.com](http://www.meritenergy.com)

June 10, 2020

Mr. Gary Yang, UIC Enforcement  
U.S. EPA, Region 8  
Mailcode: 8ENF-W-SD  
1595 Wynkoop Street  
Denver, CO 80202

RE: MIT Submissions  
Steamboat Butte and Circle Ridge Fields  
Fremont County, Wyoming

Dear Mr. Yang,

Enclosed you will find the results of integrity tests performed recently in the Steamboat Butte and Circle Ridge fields for the following Merit Energy Company operated Class II injection wells:

Tribal E-30	Permit No. <u>WY20000-02141</u>
Tribal E-26	Permit No. WY2839-02129
Tribal E-2	Permit No. WY20993-06697
Tribal E-11	Permit No. WY21096-07391
Tribal C-28	Permit No. WY2825-04382
Shoshone 65-33T	Permit No. WY2707-02174
Shoshone 65-70T	Permit No. WY2708-02176
Shoshone 65-29T	Permit No. WY20000-02173
Shoshone 65-26T	Permit No. WY20000-02171
Shoshone 65-12T	Permit No. WY20000-02167

If you have any questions regarding the enclosed result or require additional information, please contact Kevin Schmidt at (972) 628-1694 or via email at [kevin.schmidt@meritenergy.com](mailto:kevin.schmidt@meritenergy.com).

Sincerely,

MERIT ENERGY COMPANY, LLC

Arlene Valliquette  
Regulatory Manager

Encls. (20)

U2 Entered

Date 9/15/20

Initial JS

# Mechanical Integrity Test Tubing/Casing Annulus Pressure Test

U.S. Environmental Protection Agency  
Underground Injection Control Program  
1595 Wynkoop Street, Denver, CO 80202-1129

EPA Witness: \_\_\_\_\_

Date: 6/1/2020

Test conducted by: Matt & Arlen Armajo

Others present: \_\_\_\_\_

Well Name: <u>E-30 Tribal</u>	Type: <u>ER</u> SWD Status: <u>AC</u> TA UC
Field: <u>Steamboat Butte, Wind River</u>	
Location: <u>SW 1/4 NE 1/4</u> Sec: <u>5</u> T <u>3</u> N/S R <u>1</u> E/W County: <u>Fremont</u> State: <u>WY</u>	
Operator: _____	
Last MIT: <u>6/1/3/2015</u> Maximum Allowable Pressure: <u>1830</u> # PSIG	

Regularly scheduled test? ☒ Yes ☐ No  
 Initial test for permit? ☐ Yes ☒ No  
 Test after well rework? ☐ Yes ☒ No

Well injecting during test? If Yes, rate: \_\_\_\_\_ bpd

Pre-test annulus pressure: 0 psig

MIT DATA TABLE	Test #1	Test #2	Test #3
<b>TUBING</b>	<b>PRESSURE RECORD</b>		
Initial Pressure	120 # psig	psig	psig
End of test pressure	120 # psig	psig	psig
<b>CASING/TUBING ANNULUS</b>	<b>PRESSURE RECORD</b>		
0 minutes	psig	psig	psig
5 minutes	1020 # psig	psig	psig
10 minutes	psig	psig	psig
15 minutes	psig	psig	psig
20 minutes	psig	psig	psig
25 minutes	psig	psig	psig
30 minutes	1000 # psig	psig	psig
_____ minutes	psig	psig	psig
_____ minutes	psig	psig	psig
<b>RESULT</b>	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail

Does the annulus pressure build back up after the test? If Yes, 210 psig.

## MECHANICAL INTEGRITY PRESSURE TEST

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

Used 1 barrel of fluid to test

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Signature of Witness: Glen D. Amato

### OFFICE USE ONLY - COMPLIANCE FOLLOWUP

Staff \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Do you agree with the reported test results? ☐ YES ☐ NO

If not, why?

Possible violation identified? ☐ YES ☐ NO

If YES, what

**If YES - followup initiated?** ☐ YES

☐ NO - why not?

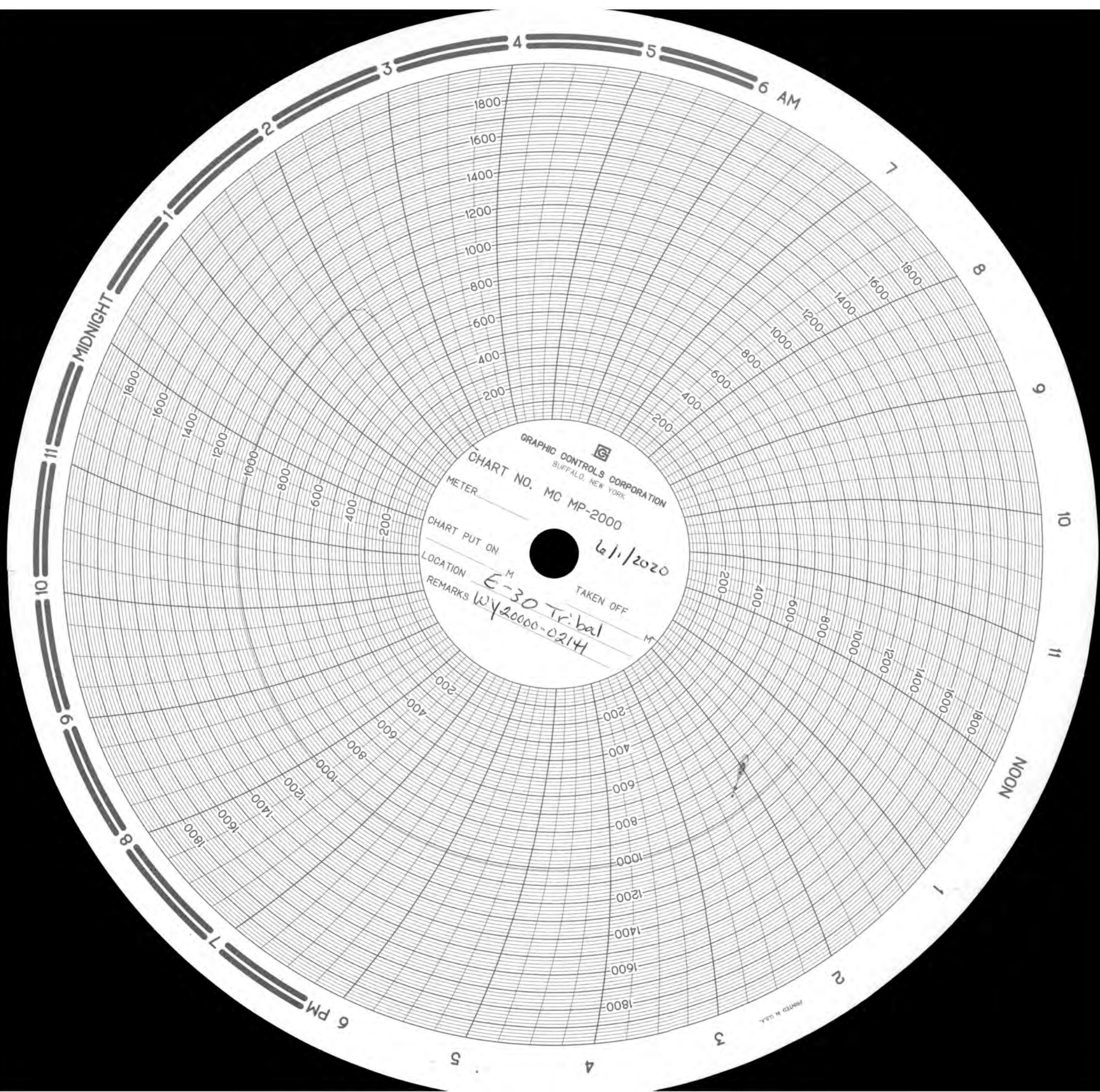
☐ Data Entry

☐ Compliance Staff

☐ 2<sup>nd</sup> Data Entry

☐ Hardcopy Filing









United States Environmental Protection Agency  
Washington, DC 20460

## ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT

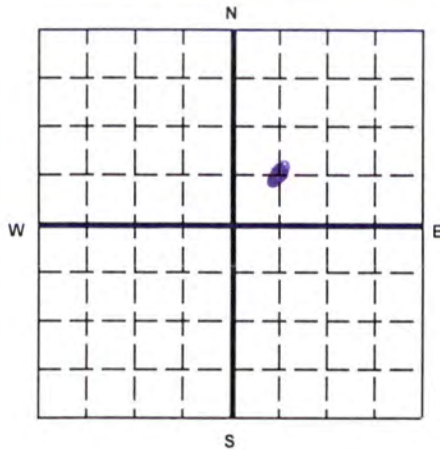
Name and Address of Existing Permittee

Merit Energy Company  
13727 Noel Rd. Suite 1200, Dallas, TX 75240

Name and Address of Surface Owner

Northern Arapaho & Eastern Shoshone Tribes  
Wind River Reservation

Locate Well and Outline Unit on  
Section Plat - 640 Acres



State  
WY

County  
Fremont

Permit Number  
wy20000-02141

Surface Location Description

1/4 of 1/4 of SW 1/4 of NE 1/4 of Section 5 Township 3N Range 1W

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface

Location 1600 ft. from (N/S) N Line of quarter section  
and 1600 ft. from (E/W) E Line of quarter section.

WELL ACTIVITY

- ☐ Brine Disposal  
☒ Enhanced Recovery  
☐ Hydrocarbon Storage

TYPE OF PERMIT

- ☒ Individual  
☐ Area  
Number of Wells 1

Lease Name Tribal E

Well Number 30-T

INJECTION PRESSURE

TOTAL VOLUME INJECTED

TUBING -- CASING ANNULUS PRESSURE  
(OPTIONAL MONITORING)

MONTH	YEAR	AVERAGE PSIG	MAXIMUM PSIG	BBL	MCF	MINIMUM PSIG	MAXIMUM PSIG
January-2018		1005	1020	45978	0	0	0
February-2018		990	1000	44807	0	0	0
March-2018		928	1000	45017	0	0	0
April-2018		1005	1020	50832	0	0	0
May-2018		994	1020	48742	0	0	0
June-2018		1018	1020	51194	0	0	0
July-2018		1013	1020	50590	0	0	0
August-2018		996	1000	51565	0	0	0
September-2018		999	1000	51359	0	0	0
October-2018		926	980	48253	0	0	0
November-2018		830	840	40849	0	0	0
December-2018		894	920	47840	0	0	0

### Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

Name and Official Title (Please type or print)

Phillip White, Regulatory Analyst

Signature

Date Signed

02/06/19

Date  
Initial

2/25/19  
RCS

GREEN

BLUE

CBI

TAB

2

## Water Analysis Report

Customer: **Merit Energy (1007905)**

Region: **Steamboat Field**

Location: Northwest WY

System: Injection System

Equipment: C-1 Injection

Lab ID: **ABU-0045**

Sample Point: **Injection Pump**

Analyses	Result	Unit
Bicarbonate	1171	mg/L
Carbonate	Not Detected	mg/L
Conductivity (Calculated)	14021	$\mu\text{S} - \text{cm}^3$
Ionic Strength	0.17	
Resistivity	0.713	ohms - m
Specific Gravity	1.005	
Total Dissolved Solids	8973.862	mg/L

Anions	Result	Unit
Chloride	2906	mg/L
Sulfate	1807	mg/L

### Saturation Index Calculation (Tomson-Oddo Model)

### Comments




 United States Environmental Protection Agency  
 Washington, DC 20460

**ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT**

Name and Address of Existing Permittee <b>Merit Energy Company</b> 13727 Noel Road Suite 1200, Dallas, TX 75240		Name and Address of Surface Owner <b>Northern Arapaho &amp; Eastern Shoshone Tribes</b> Wind River Reservation				
Locate Well and Outline Unit on Section Plat - 640 Acres  	State <b>WY</b>	County <b>Fremont</b>	Permit Number <b>WY20000-02141</b>			
	Surface Location Description ___ 1/4 of ___ 1/4 of <b>SW</b> 1/4 of <b>NE</b> 1/4 of Section <b>5</b> Township <b>3N</b> Range <b>1W</b>					
	Locate well in two directions from nearest lines of quarter section and drilling unit  Surface Location <b>1600</b> ft. from (N/S) <b>N</b> Line of quarter section and <b>1600</b> ft. from (E/W) <b>E</b> Line of quarter section.					
	<table border="0" style="width:100%"> <tr> <td style="width:50%"> <b>WELL ACTIVITY</b>  <input type="checkbox"/> Brine Disposal  <input checked="" type="checkbox"/> Enhanced Recovery  <input type="checkbox"/> Hydrocarbon Storage         </td> <td style="width:50%"> <b>TYPE OF PERMIT</b>  <input checked="" type="checkbox"/> Individual  <input type="checkbox"/> Area          Number of Wells <b>1</b> </td> </tr> <tr> <td colspan="2">         Lease Name <b>Tribal E</b> Well Number <b>30-T</b> </td> </tr> </table>			<b>WELL ACTIVITY</b> <input type="checkbox"/> Brine Disposal <input checked="" type="checkbox"/> Enhanced Recovery <input type="checkbox"/> Hydrocarbon Storage	<b>TYPE OF PERMIT</b> <input checked="" type="checkbox"/> Individual <input type="checkbox"/> Area Number of Wells <b>1</b>	Lease Name <b>Tribal E</b> Well Number <b>30-T</b>
<b>WELL ACTIVITY</b> <input type="checkbox"/> Brine Disposal <input checked="" type="checkbox"/> Enhanced Recovery <input type="checkbox"/> Hydrocarbon Storage	<b>TYPE OF PERMIT</b> <input checked="" type="checkbox"/> Individual <input type="checkbox"/> Area Number of Wells <b>1</b>					
Lease Name <b>Tribal E</b> Well Number <b>30-T</b>						

		INJECTION PRESSURE		TOTAL VOLUME INJECTED		TUBING -- CASING ANNULUS PRESSURE (OPTIONAL MONITORING)	
MONTH	YEAR	AVERAGE PSIG	MAXIMUM PSIG	BBL	MCF	MINIMUM PSIG	MAXIMUM PSIG
January	2017	1329	1380	73980	0	0	0
February	2017	1296	1325	57932	0	0	0
March	2017	1308	1320	75463	0	0	0
April	2017	1330	1380	77528	0	0	0
May	2017	1386	1420	81359	0	0	0
June	2017	1406	1440	83856	0	0	0
July	2017	1219	1380	66398	0	0	0
August	2017	1115	1178	57801	0	0	0
September	2017	1073	1118	54452	0	0	0
October	2017	1001	1023	53948	0	0	0
November	2017	965	980	50689	0	0	0
December	2017	940	960	49889	0	0	0

**Certification**

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

Name and Official Title (Please type or print) <b>Tiffany Stebbins, Regulatory Analyst</b>	Signature 	Date Signed <b>1-31-18</b>
---	---------------	-------------------------------

**U2 Entered**
**Date**
**2/8/18**
**Initial**
**DS**

	GREEN	BLUE	CBI
TAB		2	

## PAPERWORK REDUCTION ACT

The public reporting and record keeping burden for this collection of information is estimated to average 30 hours per quarter. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

## Water Analysis Report

Attention: **Jason.Ciz@CHAMP-TECH.com**

Location Code: **159188**

Sample ID: **AK07267**

Login Batch: **2018-01-18-001-45-FMSW**

Collection Date: **01/09/2018**

Receive Date: **01/18/2018**

Report Date: **01/22/2018**

Customer: **Merit Energy (1007905)**

Region: **Steamboat Field**

Location: **Northwest WY**

System: **Water Injection System**

Equipment: **E Battery Injection**

Lab ID: **ABU-0045**

Sample Point: **Injection Pump**

Analyses	Result	Unit
Dissolved CO2	106	mg/L
Dissolved H2S	188	mg/L
pH	7.2	
Pressure	30	psi
Temperature	130.5	° F

Analyses	Result	Unit
Bicarbonate	1147	mg/L
Carbonate	Not Detected	mg/L
Conductivity (Calculated)	21044	µS - cm3
Ionic Strength	0.25	
Resistivity	0.475	ohms - m
Specific Gravity	1.007	
Total Dissolved Solids	13468.29	mg/L

Cations	Result	Unit
Iron	0.232	mg/L
Manganese	0.024	mg/L
Barium	0.053	mg/L
Strontium	13.09	mg/L
Calcium	349.7	mg/L
Magnesium	60.6	mg/L
Sodium	4422.59	mg/L

Anions	Result	Unit
Chloride	5523	mg/L
Sulfate	1952	mg/L

Scale Type	Result
Anhydrite CaSO4 SI	-0.78
Barite BaSO4 PTB	0.0
Barite BaSO4 SI	0.08
Calcite CaCO3 PTB	229.3
Calcite CaCO3 SI	0.97
Celestite SrSO4 SI	-0.14
Gypsum CaSO4 SI	-0.81
Hemihydrate CaSO4 SI	-0.71

Saturation Index Calculation (Tomson-Oddo Model)

This document contains the confidential and/or proprietary information of NALCO Champion. The recipient agrees to maintain the confidentiality of the terms of this document and shall not reproduce it by any means, disclose the contents of it to any third party, or use the contents of it for any purpose other than the purpose for which it was intended by NALCO Champion.





United States Environmental Protection Agency  
Washington, DC 20460

## ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT

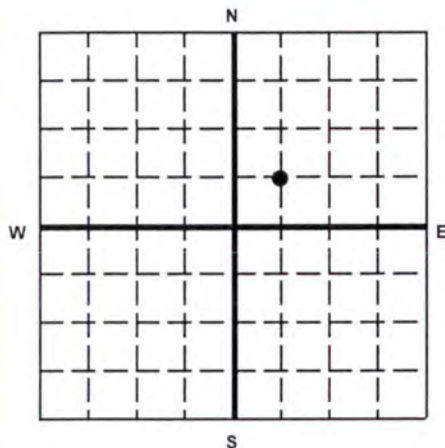
Name and Address of Existing Permittee

MERIT ENERGY COMPANY  
13727 NOEL ROAD SUITE 1200, DALLAS, TX 75240

Name and Address of Surface Owner

NORTHERN ARAPAHO & EASTERN SHOSHONE TRIBES  
WIND RIVER RESERVATION

Locate Well and Outline Unit on  
Section Plat - 640 Acres



State

WY

County

FREMONT

Permit Number

WY20000-02141

Surface Location Description

1/4 of 1/4 of SW 1/4 of NE 1/4 of Section 5 Township 3N Range 1W

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface

Location 1600 ft. from (N/S) N Line of quarter section  
and 1600 ft. from (E/W) E Line of quarter section.

WELL ACTIVITY

- ☐ Brine Disposal  
☒ Enhanced Recovery  
☐ Hydrocarbon Storage

TYPE OF PERMIT

- ☒ Individual  
☐ Area

Number of Wells 1

Lease Name TRIBAL E

Well Number 30-T

INJECTION PRESSURE

TOTAL VOLUME INJECTED

TUBING -- CASING ANNULUS PRESSURE  
(OPTIONAL MONITORING)

MONTH	YEAR	AVERAGE PSIG	MAXIMUM PSIG	BBL	MCF	MINIMUM PSIG	MAXIMUM PSIG
January-2016		1113	1120	59727	0	0	0
February-2016		1281	1380	67804	0	0	0
March-2016		1220	1340	72791	0	0	0
April-2016		1150	1320	48303	0	0	0
May-2016		1101	1143	72188	0	0	0
June-2016		1234	1280	69822	0	0	0
July-2016		1290	1320	80206	0	0	0
August-2016		1298	1340	77408	0	0	0
September-2016		1360	1380	78395	0	0	0
October-2016		1307	1360	75594	0	0	0
November-2016		1326	1350	79192	0	0	0
December-2016		1315	1320	79068	0	0	0

### Certification

Merit Energy Company became operator on  
12/01/16. January - November 2016 form data  
was provided by Marathon Oil Company.

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

Name and Official Title (Please type or print)

TIFFANY STEBBINS, REGULATORY ANALYST

Signature

Tiffany Stebbins U2 Entered

Date Signed

2-13-17

## PAPERWORK REDUCTION ACT

The public reporting and record keeping burden for this collection of information is estimated to average 30 hours per quarter. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

# NALCO Champion

## Water Analysis Report

An Ecolab Company

Attention: Jason.Ciz@CHAMP-TECH.com

Location Code: 5750

Sample ID: AI01467

Login Batch: 170131144452-45-SW

Collection Date: 01/25/2017

Receive Date: 01/31/2017

Report Date: 02/01/2017

Customer: Merit Energy (1007905)

Region: Steamboat Butte Field

Location: Northwest WY

System: Production System

Equipment: E-Battery Injection

Lab ID: ABU-0045

Sample Point: Injection Pump

Analyses	Result	Unit
Dissolved CO2	211	mg/L
Dissolved H2S	255	mg/L
pH	6.72	
Pressure	7	psi
Temperature	125	°F

Cations	Result	Unit
Iron	2.185	mg/L
Manganese	0.084	mg/L
Barium	<.25	mg/L
Strontium	5.31	mg/L
Calcium	347	mg/L
Magnesium	64.21	mg/L
Sodium	3854.27	mg/L

Scale Type	Result
Anhydrite CaSO4 SI	-0.80
Barite BaSO4 SI	-1.57
Calcite CaCO3 PTB	118.5
Calcite CaCO3 SI	0.42
Celestite SrSO4 SI	-0.50
Gypsum CaSO4 SI	-0.79
Hemihydrate CaSO4 SI	-0.68
Saturation Index Calculation (Tomson-Oddo Model)	

Analyses	Result	Unit
Bicarbonate	988	mg/L
Carbonate	Not Detected	mg/L
Conductivity (Calculated)	18701	µS - cm3
Ionic Strength	0.22	
Resistivity	0.535	ohms - m
Specific Gravity	1.005	
Total Dissolved Solids	11971.06	mg/L

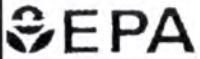
Anions	Result	Unit
Chloride	4690	mg/L
Sulfate	2020	mg/L

Comments
----------

Cations were duplicated.

This document contains the confidential and/or proprietary information of NALCO Champion. The recipient agrees to maintain the confidentiality of the terms of this document, and shall not reproduce it by any means, disclose the contents of it to any third party, or use the contents of it for any purpose other than the purpose for which it was intended by NALCO Champion.





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, DC 20460

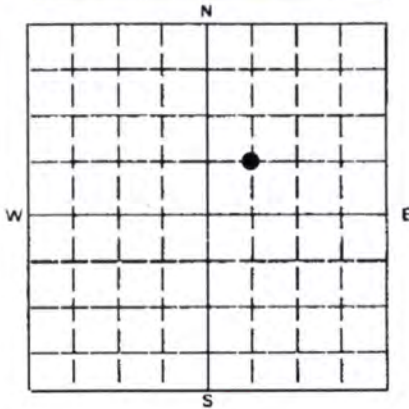
**ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT**

NAME AND ADDRESS OF EXISTING PERMITTEE

MARATHON OIL COMPANY  
1501 STAMPEDE AVENUE  
CODY, WYOMING 82414

NAME AND ADDRESS OF SURFACE OWNER

NORTHERN ARAPAHO &  
EASTERN SHOSHONE TRIBES  
WIND RIVER RESERVATION

LOCATE WELL AND OUTLINE UNIT ON  
SECTION PLAT -- 640 ACRES

STATE

WY

COUNTY

FREMONT

PERMIT NUMBER

WY20000-02141

SURFACE LOCATION DESCRIPTION

¼ OF SW ¼ OF NE ¼ SECTION 5 TOWNSHIP 3N RANGE 1W

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface

Location 1600 ft. from (N/S) N Line of quarter section (see attachment)

and 1600 ft. from (E/W) E Line of quarter section

WELL ACTIVITY

- ☐ Brine Disposal  
☒ Enhanced Recovery  
☐ Hydrocarbon Storage

TYPE OF PERMIT

☒ Individual☐ Area

Number of Wells 1

**TRIBAL E 30 -T**

Lease Name STEAMBOAT BUTTE

Well Number

INJECTION PRESSURE

TOTAL VOLUME INJECTED

TUBING - CASING ANNULUS PRESSURE  
(OPTIONAL MONITORING)

MONTH	YEAR	AVERAGE PSIG	MAXIMUM PSIG	BBL	BWIPD	MINIMUM PSIG	MAXIMUM PSIG
Jan	2015	1,350	1,400	81,096	2,616	0	0
Feb	2015	1,390	1,480	69,238	2,473	0	0
Mar	2015	1,389	1,504	85,270	2,751	0	0
Apr	2015	1,280	1,280	71,059	2,369	0	0
May	2015	1,373	1,406	82,230	2,653	0	0
Jun	2015	1,392	1,440	82,968	2,766	0	0
Jul	2015	1,382	1,400	86,306	2,784	0	0
Aug	2015	1,412	1,450	87,456	2,821	0	0
Sep	2015	1,400	1,420	80,442	2,681	0	0
Oct	2015	1,338	1,400	82,062	2,647	0	0
Nov	2015	1,380	1,380	77,236	2,575	0	0
Dec	2015	1,213	1,380	66,234	2,137	0	0

NA=Not Available

**CERTIFICATION**

*I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32).*

NAME AND OFFICIAL TITLE (Please type or print)

Tiffany Stebbins  
Sr. Regulatory Compliance Rep.

SIGNATURE

DATE SIGNED

February 12, 2016

1/2 Entered

Date

2/12/16

Initial

DS





# NALCO Champion Water Analysis Report

An Ecolab Company

Attention: [Jason.Ciz@CHAMP-TECH.com](mailto:Jason.Ciz@CHAMP-TECH.com)

Customer: **Marathon Oil Co. (1500206)**

Location Code: **159188**

Sample ID: **AF48011**

Login Batch: **160120112531-45-CRSWO**

Collection Date: **01/12/2016**

Receive Date: **01/20/2016**

Report Date: **01/21/2016**

Region: **Steamboat Field**

Location: **Northwest WY**

System: **Water Injection System**

Equipment: **E Battery Injection**

Lab ID: **ABU-0045**

Sample Point: **Injection Pump**

Analyses	Result	Unit
Dissolved CO2	299	mg/L
Dissolved H2S	178	mg/L
pH	7.3	
Pressure	30	psi
Temperature	125	° F

Analyses	Result	Unit
Bicarbonate	976	mg/L
Carbonate	Not Detected	mg/L
Conductivity	12163	µS - cm3
Ionic Strength	0.15	
Resistivity	0.822	ohms - m
Specific Gravity	1.006	
Total Dissolved Solids	7785.959	mg/L

Cations	Result	Unit
Iron	1.839	mg/L
Manganese	0.041	mg/L
Barium	0.039	mg/L
Strontium	11.99	mg/L
Calcium	307.5	mg/L
Magnesium	50.66	mg/L
Sodium	2264.89	mg/L

Anions	Result	Unit
Chloride	2100	mg/L
Sulfate	2073	mg/L

Scale Type	Result
Anhydrite CaSO4 SI	-0.82
Barite BaSO4 PTB	0.0
Barite BaSO4 SI	0.14
Calcite CaCO3 PTB	211.1
Calcite CaCO3 SI	1.08
Celestite SrSO4 SI	-0.07
Gypsum CaSO4 SI	-0.81
Hemihydrate CaSO4 SI	-0.67
Saturation Index Calculation (Tomson-Oddo Model)	

Comments:

This document contains the confidential trade proprietary information of NALCO Champion. The recipient agrees to maintain the confidentiality of this information and shall not reproduce it by any means, disclose the contents of it to any third party, or use the contents of it for any purpose other than the purpose for which it was intended by NALCO Champion.

01/27/2016

Page 1 of 1



United States Environmental Protection Agency  
Washington, DC 20460

## ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT

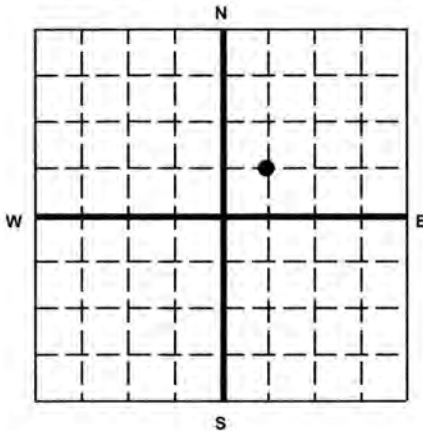
### Name and Address of Existing Permittee

Marathon Oil Company  
1501 Stampede Avenue, Cody, WY 82414

### Name and Address of Surface Owner

Northern Arapaho and Eastern Shoshone Tribes  
Wind River Reservation

### Locate Well and Outline Unit on Section Plat - 640 Acres



State  
WY

County  
Fremont

Permit Number  
WY20000-02141

### Surface Location Description

1/4 of 1/4 of SW 1/4 of NE 1/4 of Section 5 Township 3N Range 1W

Locate well in two directions from nearest lines of quarter section and drilling unit

### Surface

Location 1600 ft. from (N/S) N Line of quarter section

and 1600 ft. from (E/W) E Line of quarter section.

### WELL ACTIVITY

- ☐ Brine Disposal  
☒ Enhanced Recovery  
☐ Hydrocarbon Storage

### TYPE OF PERMIT

- ☒ Individual  
☐ Area

Number of Wells 1

Lease Name Steamboat Butte

Well Number Tribal E 30-T

### INJECTION PRESSURE

### TOTAL VOLUME INJECTED

### TUBING -- CASING ANNULUS PRESSURE (OPTIONAL MONITORING)

MONTH	YEAR	AVERAGE PSIG	MAXIMUM PSIG	BBL	MCF	MINIMUM PSIG	MAXIMUM PSIG
January-2014		1256	1396	78309	0	0	0
February-2014		1243	1600	78993	0	0	0
March-2014		1347	1368	86301	0	0	0
April-2014		1285	1327	80438	0	0	0
May-2014		1307	1320	80507	0	0	0
June-2014		1323	1323	79259	0	0	0
July-2014		1289	1323	80685	0	0	0
August-2014		1217	1290	70922	0	0	0
September-2014		1266	1280	78981	0	0	0
October-2014		1288	1297	84694	0	0	0
November-2014		1328	1400	81117	0	0	0
December-2014		1328	1400	85518	0	0	0

### Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

Name and Official Title (Please type or print)

Tiffany Stebbins, Sr. Regulatory Compliance Rep.

Signature

*Tiffany Stebbins*

Date Signed

2-13-15

EPA Form 7520-11 (Rev. 12-11)

Date

3/19/15

Initial

GW

TAB	GREEN	BLUE	CBI
		2	

## **PAPERWORK REDUCTION ACT**

The public reporting and record keeping burden for this collection of information is estimated to average 30 hours per quarter. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

# NALCO Champion Water Analysis Report

An Ecolab Company

Attention: Jason.Ciz@CHAMP-TECH.com

Customer: **Marathon Oil Co. (1500206)**

Location Code: **159188**

Region: **Steamboat Butte Field**

Sample ID: **AD00680**

Location: **Northwest WY**

Login Batch: **141202095418**

System: **Water Injection System**

Collection Date: **11/24/2014**

Equipment: **E Battery Injection**

Receive Date: **12/02/2014**

Lab ID: **ABU-0045**

Report Date: **12/03/2014**

Sample Point: **Injection Pump**

Analyses	Result	Unit
Dissolved CO2	192	mg/L
Dissolved H2S	205	mg/L
pH	7.15	
Pressure	50	psi
Temperature	102	° F

Analyses	Result	Unit
Bicarbonate	4624	mg/L
Carbonate	Not Detected	mg/L
Conductivity	19347	µS - cm3
Ionic Strength	0.19	
Resistivity	0.517	ohms - m
Specific Gravity	1.0078	
Total Dissolved Solids	12382.09	mg/L

Cations	Result	Unit
Iron	0.023	mg/L
Manganese	0.003	mg/L
Barium	0.007	mg/L
Strontium	1.011	mg/L
Calcium	36.84	mg/L
Magnesium	6.33	mg/L
Sodium	3840.88	mg/L

Anions	Result	Unit
Chloride	1757	mg/L
Sulfate	2116	mg/L

Scale Type	Result
Anhydrite CaSO4 SI	-1.87
Barite BaSO4 SI	-0.53
Calcite CaCO3 PTB	18.4
Calcite CaCO3 SI	0.37
Celestite SrSO4 SI	-1.17
Gypsum CaSO4 SI	-1.70
Hemihydrate CaSO4 SI	-1.56
Saturation Index Calculation (Tomson-Oddo Model)	

<b>Comments:</b>
------------------

This document contains the confidential and/or proprietary information of NALCO Champion. The recipient agrees to maintain the confidentiality of the terms of this document, and shall not reproduce it by any means, disclose the contents of it to any third party, or use the contents of it for any purpose other than the purpose for which it was intended by NALCO Champion.



2:29  
2:38

# Mechanical Integrity Test

## Casing or Annulus Pressure Mechanical Integrity Test

U.S. Environmental Protection Agency  
Underground Injection Control Program, UIC Direct Implementation Program 8P-W-GW  
999 18<sup>th</sup> Street, Suite 500 Denver, CO 80202-2466

EPA Witness: \_\_\_\_\_ Date: 6 / 3 / 15

Test conducted by: Chris Hamlin

Others present: \_\_\_\_\_

Well Name: <u>TRIBAL E #30 (WY20000-02141)</u>	Type: <u>ER</u> <u>SWD</u>	Status: <u>(AC)</u> <u>TA</u> <u>UC</u>
Field: <u>STEAMBOAT BUTTE</u>		
Location: <u>SW NE</u> Sec: <u>5</u> T <u>3N</u> N/S R <u>1W</u> E/W County: <u>FREMONT</u> State: <u>WY</u>		
Last MIT: <u>10 / 27 / 2010</u> Maximum Allowable Pressure: <u>1830</u> PSIG		

Is this a regularly scheduled test? ☒ Yes ☐ No

Initial test for permit? ☐ Yes ☒ No

Test after well rework? ☐ Yes ☒ No

Well injecting during test? ☒ Yes ☐ No If Yes, rate: 2863 bpd

Pre-test casing/tubing annulus pressure: 0 / 1400 psig

MIT DATA TABLE		TEST #1		TEST #2		TEST #3	
TUBING		PRESSURE					
Initial Pressure		<u>1400</u>	psig		psig		psig
End of test pressure		<u>1400</u>	psig		psig		psig
CASING / TUBING		ANNULUS		PRESSURE			
0 minutes		<u>1005 / 1400</u>	psig		psig		psig
5 minutes		<u>1000 / 1400</u>	psig		psig		psig
10 minutes		<u>1000 / 1400</u>	psig		psig		psig
15 minutes		<u>1000 / 1400</u>	psig		psig		psig
20 minutes		<u>1000 / 1400</u>	psig		psig		psig
25 minutes		<u>1000 / 1400</u>	psig		psig		psig
30 minutes		<u>1000 / 1400</u>	psig		psig		psig
minutes			psig		psig		psig
minutes			psig		psig		psig
RESULTS		<input checked="" type="checkbox"/> Pass	<input type="checkbox"/> Fail	<input type="checkbox"/> Pass	<input type="checkbox"/> Fail	<input type="checkbox"/> Pass	<input type="checkbox"/> Fail

Does the annulus pressure build back up after the test? ☐ Yes ☒ No

	GREEN	BLUE	CBI
TAB		<u>2</u>	

U2 Entered

Date 7/6/15

Initial JB (over)

## MECHANICAL INTEGRITY PRESSURE TEST

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc. :

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

Signature of Witness: \_\_\_\_\_

### OFFICE USE ONLY – COMPLIANCE FOLLOW-UP

Staff: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Do you agree with the reported test results? ☐ YES ☐ NO

If not, why? \_\_\_\_\_

Possible violation identified? ☐ YES ☐ NO

If YES, what: \_\_\_\_\_

IF YES, follow-up initiated? ☐ YES \_\_\_\_\_

☐ NO - why not? \_\_\_\_\_

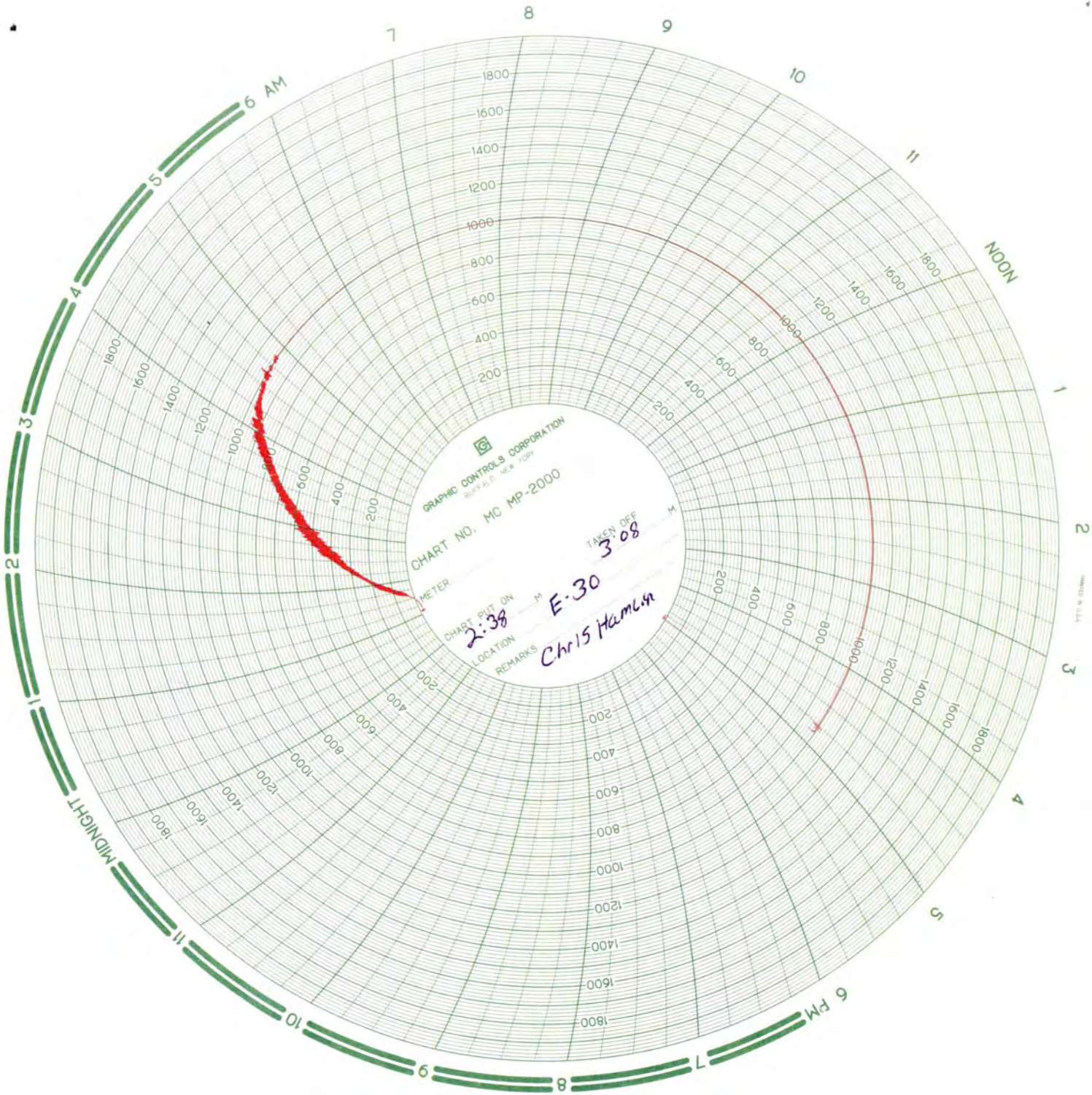
☐ Data Entry

☐ Compliance Staff

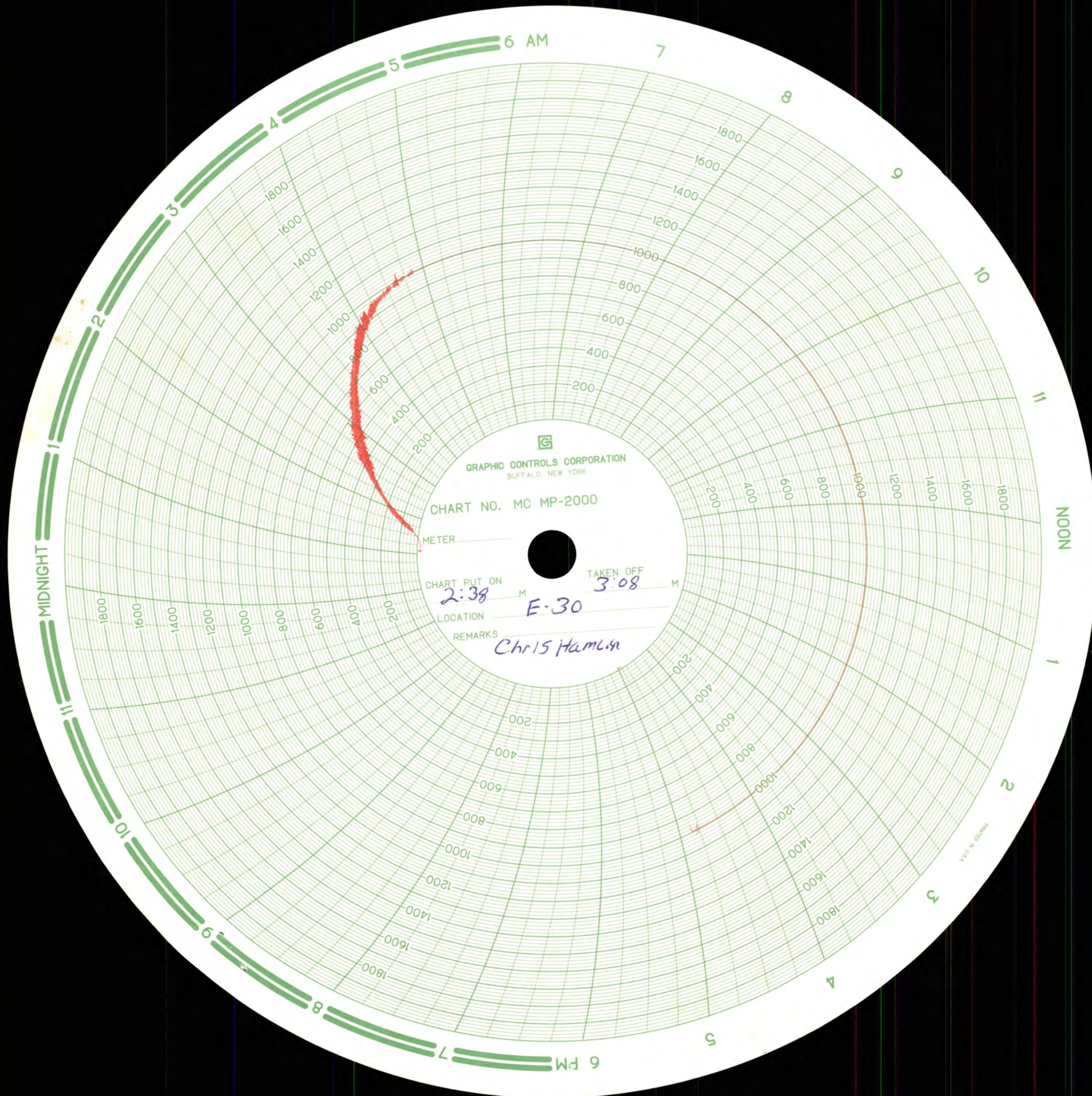
☐ 2<sup>nd</sup> Data Entry

☐ Hardcopy Filing











**Marathon Oil Company**

1501 Stampede Avenue

Cody, WY 82414-4719

Telephone: 307.527.2223 Mobile: 307.250.7476

Fax: 307.527.3280

tastebbins@marathonoil.com



May 7, 2015

Don Breffle

Mail Code 8ENF-UFO

United States Environmental Protection Agency

1595 Wynkoop Street

Denver, CO 80202-1129

Re: Underground Injection Control (UIC)  
 Annual Mechanical Integrity Testing  
 Circle Ridge & Steamboat Butte Oil Fields  
 Fremont County, Wyoming

Dear Don:

Marathon intends to perform mechanical integrity tests on injection wells that are due for integrity testing in 2015. These wells include active and temporarily abandoned injectors. Testing will be performed the week of May 18 to May 22, 2015. All participants can plan to meet daily at the main Marathon office in the Steamboat Field at 7:00 A.M. for a brief safety overview prior to proceeding to the first well site for the day.

If there are any changes, we will notify you right away. Upon completion of the mechanical integrity tests, Marathon will forward original paperwork to your office. Please contact me at the phone number or email listed above if you need additional information.

FIELD	WELLS*	EPA Permit No.	API No.	Status
Circle Ridge	Shoshone 65-02	WY20969-06387	49-013-06766	Active
Circle Ridge	Shoshone 65-12	WY20000-02167	49-013-06837	Active
Circle Ridge	Shoshone 65-20	WY20000-02169	49-013-06833	TA
Circle Ridge	Shoshone 65-25	WY20000-02170	49-013-06830	TA
Circle Ridge	Shoshone 65-26	WY20000-02171	49-013-06844	Active
Circle Ridge	Shoshone 65-29	WY20000-02173	49-013-06852	Active
Circle Ridge	Shoshone 65-36	WY20000-02165	49-013-06829	TA
Circle Ridge	Shoshone 65-41	WY20000-02179	49-013-06839	TA
Circle Ridge	Shoshone 65-42	WY20000-02182	49-013-06851	TA
Circle Ridge	Shoshone 65-68	WY20837-02175	49-013-21497	TA
Circle Ridge	Shoshone 65-70	WY20708-02176	49-013-21498	Active
Circle Ridge	Shoshone 65-77A	WY20521-02119	49-013-21637	TA
Circle Ridge	Shoshone 66-03	WY20000-03088	49-013-06788	TA
Circle Ridge	Shoshone 66-26	WY20821-02160	49-013-06748	TA

\* Note: List is sorted by well name and number and is not necessarily in the same order as daily well testing.

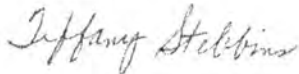
	GREEN	BLUE	CBI
TAB		2	

FIELD	WELLS*	EPA Permit No.	API No.	Status
Steamboat Butte	Brinkerhoff 4	WY20000-02133	49-013-06364	Active
Steamboat Butte	Tribal C-28-Phos	WY20825-04382	49-013-21081	Active, dual
Steamboat Butte	Tribal C-28-Tens	WY20825-04382	49-013-21081	Active, dual
Steamboat Butte	Tribal E-02	WY20993-06697	49-013-06404	Active
Steamboat Butte	Tribal E-26	WY20839-02129	49-013-06411	Active
Steamboat Butte	Tribal E-30	WY20000-02141	49-013-21402	Active

\* Note: List is sorted by well name and number and is not necessarily in the same order as daily well testing.

Attached is a location map for the Steamboat Butte field office.

Sincerely,



Tiffany Stebbins  
Sr. Regulatory Compliance Rep.

Attachment (1)

Copy by email and mail:

Gary Wang  
Mail Code: 8ENF-UFO  
U.S. EPA Region 8  
1595 Wynkoop Street  
Denver, CO 80202-1129

Trisha Cachelin  
Wind River Agency  
Bureau of Indian Affairs  
P.O. Box 158  
Fort Washakie, WY 82514

Stuart Cеровski  
Bureau of Land Management  
Lander Field Office  
1335 Main Street  
Lander, WY 82520

Tom Kropatsch  
Deputy Agency Supervisor  
Wyoming Oil & Gas Conservation Commission  
P. O. Box 2640  
Casper, WY 82602-2640

## Steamboat Butte Field Office Location



Point A is the Steamboat Butte Field Office. Traveling northwest on WY HWY 26 out of Riverton, approximately 10 miles past Kinnear turn right onto Diversion Dam Road across the cattle guard toward the Steamboat Butte Field. Cross the canal and turn right again on Maverick Springs Road. (STOP AT STEAMBOAT BUTTE OFFICE ON THE LEFT).

CHECK IN AT THE STEAMBOAT BUTTE FIELD OFFICE PRIOR TO TRAVELING TO ANY  
MARATHON OPERATED WIND RIVER FIELD LOCATION

## CONTACT INFORMATION

MARATHON CONTACTS			
Name	Title	Office	Mobile
Steve Ellis	Wind River HES	307-856-6228 x2223	307-461-3667
Kelly Saltzgiver	Wind River – Superintendent	307-856-6228 x2222	307-231-3666
Scott Holman	Wind River – Workover Supv.	307-856-6228 x2242	307-250-5068
Justin Lajeunesse	Wind River – Production Supv.	307-856-6228 x2230	307-850-4930
Trevor Pollock	Wind River - Engineering	307-587-4226 x2228	307-699-1425

## Wang, Gary

---

**From:** Stebbins, Tiffany A. (MRO) <tastebbins@marathonoil.com>  
**Sent:** Friday, May 15, 2015 10:35 AM  
**To:** Breffle, Don  
**Cc:** Wang, Gary; (Stuart\_Cerovski@blm.gov); Trisha Cachelin; Holman, Scott (MRO); Pollock, Trevor (MRO)  
**Subject:** Marathon annual MITs on injection wells, Wind River Reservation  
**Attachments:** Ltr to EPA re MIT witness invitation 5-07-15.pdf

Re: Underground Injection Control (UIC)  
Annual Mechanical Integrity Testing  
Circle Ridge Oil Field  
Steamboat Butte Oil Field  
Fremont County, Wyoming

This is a courtesy reminder email.

Marathon is still planning to begin mechanical integrity testing Monday May 18 on injection wells that are due for integrity testing in 2015. These wells include active and temporarily abandoned injectors. A copy of my notification letter, that includes a well list, is attached for reference.

Testing will be performed the week of May 18 to May 22, 2015. All participants can plan to meet daily at the main Marathon office in the Steamboat Field at 7:00 A.M. for a brief safety overview prior to proceeding to the first well site for the day.

Thanks,

*Tiffany Stebbins*

Regulatory Compliance Rep  
Marathon Oil Company  
Wyoming Asset Team  
Phone 307-527-2223  
Cell 307-250-7476



Wang, Gary

---

**From:** Stebbins, Tiffany A. (MRO) <tastebbins@marathonoil.com>  
**Sent:** Tuesday, June 02, 2015 7:58 AM  
**To:** Breffle, Don; Wang, Gary  
**Subject:** Marathon's annual MIT's

Don and Gary,

Wanted to provide an update to our integrity testing. We were able to test all Circle Ridge wells prior to bad weather coming in. Due to current weather conditions and very muddy conditions, we've been unable to reach and test the Steamboat Butte wells. We are hoping to begin testing wells tomorrow.

Thanks,

*Tiffany Stebbins*

Regulatory Compliance Rep  
Marathon Oil Company  
Wyoming Asset Team  
Phone 307-527-2223  
Cell 307-250-7476


 UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
 WASHINGTON, DC 20460

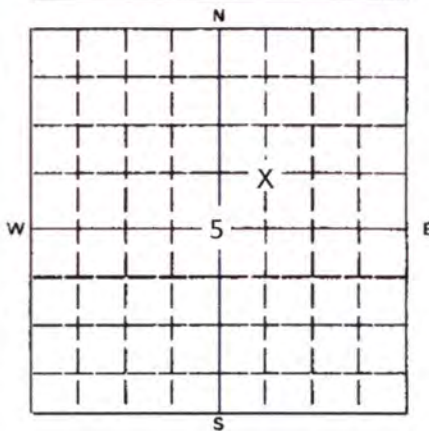
**ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT**

NAME AND ADDRESS OF EXISTING PERMITTEE

 MARATHON OIL COMPANY  
 1501 STAMPEDE AVENUE  
 CODY, WYOMING 82414

NAME AND ADDRESS OF SURFACE OWNER

 JOINT BUSINESS COUNCIL  
 P. O. BOX 217  
 FORT WASHAKIE, WY 82514

 LOCATE WELL AND OUTLINE UNIT ON  
 SECTION PLAT — 640 ACRES


STATE

WY

COUNTY

FREMONT

PERMIT NUMBER

WY20000-02141

SURFACE LOCATION DESCRIPTION

1/4 OF SW 1/4 OF NE 1/4 SECTION 5 TOWNSHIP 3N RANGE 1W

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface

Location 1600 ft. from (N/S) N Line of quarter section (see attachment)

and 1600 ft. from (E/W) E Line of quarter section

WELL ACTIVITY

☐ Brine Disposal☒ Enhanced Recovery☐ Hydrocarbon Storage

TYPE OF PERMIT

☒ Individual☐ Area

Number of Wells \_\_\_\_\_

STEAMBOAT BUTTE

TRIBAL E 30-T

Lease Name

14-20-0258-6504

Well Number

INJECTION PRESSURE

TOTAL VOLUME INJECTED

TUBING - CASING ANNULUS PRESSURE

(OPTIONAL MONITORING)

MONTH	YEAR	AVERAGE PSIG	MAXIMUM PSIG	BBL	BWIPD	MINIMUM PSIG	MAXIMUM PSIG
Jan	2013	1,164	1,311	88,520	2,855	0	0
Feb	2013	1,006	1,281	42,824	1,529	0	0
Mar	2013	1,133	1,225	78,469	2,531	0	0
Apr	2013	1,038	1,211	65,923	2,197	0	0
May	2013	1,196	1,312	82,517	2,662	0	0
Jun	2013	1,129	1,358	84,981	2,833	0	0
Jul	2013	1,294	1,356	79,853	2,576	0	0
Aug	2013	1,392	1,392	88,020	2,839	0	0
Sep	2013	1,210	1,394	75,258	2,509	0	0
Oct	2013	1,413	1,462	86,782	2,799	0	0
Nov	2013	1,358	1,454	88,374	2,946	0	0
Dec	2013	1,316	1,440	84,973	2,741	0	0

NA=Not Available

**CERTIFICATION**

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32).

NAME AND OFFICIAL TITLE (Please type or print)

 Tiffany Stebbins  
 Adv. Regulatory Compliance Rep.

SIGNATURE

DATE SIGNED

February 12, 2014

	GREEN	BLUE	CBI
TAB		2	

U2 Entered

Date 3/10/14

Initial DB

Attention: William.Smith2@CHAMP-TECH.com

Customer: Marathon Oil Co. (1500206)  
Matrix: SWICPIC  
Sample ID: AB03906  
Collection Date: 11/25/2013  
Receive Date: 12/03/2013  
Report Date: 12/05/2013  
Login Batch: 131203100455-45-SW

Equipment: Water Header  
Location Code: 114394  
Location: Northwest WY  
Region: Not Available  
System: Water Injection System  
Sampling Point: E-5 Battery  
Lab ID: ABU-0045

Analyte Name	Result	Unit
Anhydrite CaSO4 SI	-0.74	
Barite BaSO4 SI	-2.39	
Barium	0.0001	mg/L
Bicarbonate	927	mg/L
Calcite CaCO3 PTB	246.1	PTB
Calcite CaCO3 SI	1.21	
Calcium	356.7	mg/L
Carbonate	Not Detected	mg/L
Celestite SrSO4 SI	-0.07	
Chloride	1980	mg/L
Conductivity	13086	µS - cm3
Dissolved CO2	200	mg/L
Dissolved H2S	414	mg/L
Gypsum CaSO4 SI	-0.69	
Hemihydrate CaSO4 SI	-0.56	
Ionic Strength	0.17	
Iron	0.719	mg/L
Magnesium	56.57	mg/L
Manganese	0.0001	mg/L
pH of Water	7.5	
Pressure Surface	90	psi
Resistivity	0.764	ohms - m
Sodium	2383.69	mg/L
Specific Gravity	1.007	
Strontium	11.02	mg/L
Sulfate	2660	mg/L
Temperature	118	° F
Total Dissolved Solids	8375.699	mg/L





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, DC 20460

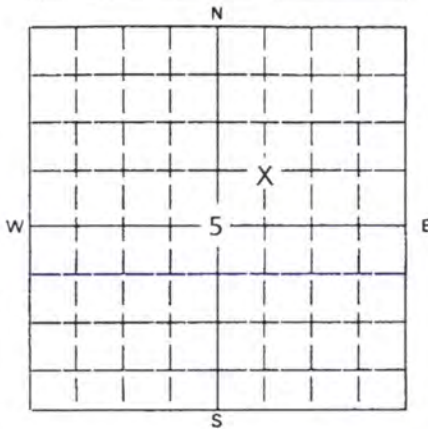
## ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT

NAME AND ADDRESS OF EXISTING PERMITTEE

MARATHON OIL COMPANY  
1501 STAMPEDE AVENUE  
CODY, WYOMING 82414

NAME AND ADDRESS OF SURFACE OWNER

JOINT BUSINESS COUNCIL  
P. O. BOX 217  
FORT WASHAKIE, WY 82514

LOCATE WELL AND OUTLINE UNIT ON  
SECTION PLAT — 640 ACRES

STATE

WY

COUNTY

FREMONT

PERMIT NUMBER

WY20000-02141

SURFACE LOCATION DESCRIPTION

1/4 OF SW 1/4 OF NE 1/4 SECTION 5 TOWNSHIP 3N RANGE 1W

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface

Location 1600 ft. from (N/S) N Line of quarter section (see attachment)

and 1600 ft. from (E/W) E Line of quarter section

WELL ACTIVITY

☐ Brine Disposal☒ Enhanced Recovery☐ Hydrocarbon Storage

TYPE OF PERMIT

☒ Individual☐ Area

Number of Wells \_\_\_\_\_

STEAMBOAT BUTTE

TRIBAL E 30-T

Lease Name 14-20-0258-6504

Well Number

INJECTION PRESSURE

TOTAL VOLUME INJECTED

TUBING - CASING ANNULUS PRESSURE

(OPTIONAL MONITORING)

MONTH	YEAR	AVERAGE PSIG	MAXIMUM PSIG	BBL	BWIPD	MINIMUM PSIG	MAXIMUM PSIG
Jan	2012	1,386	1,411	77,343	2,495	0	0
Feb	2012	1,473	1,555	80,526	2,777	0	0
Mar	2012	1,189	1,356	71,142	2,295	0	0
Apr	2012	1,390	1,421	84,995	2,833	0	0
May	2012	1,378	1,500	94,110	3,036	0	0
Jun	2012	1,349	1,401	83,306	2,777	0	0
Jul	2012	1,270	1,525	82,842	2,672	0	0
Aug	2012	1,084	1,125	63,650	2,053	0	0
Sep	2012	933	1,150	69,865	2,329	0	0
Oct	2012	1,075	1,345	83,835	2,704	0	0
Nov	2012	1,310	1,330	81,290	2,710	0	0
Dec	2012	1,082	1,238	77,590	2,503	0	0

NA=Not Available

## CERTIFICATION

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32).

NAME AND OFFICIAL TITLE (Please type or print)

Tiffany Stebbins  
Adv. Regulatory Compliance Rep.

SIGNATURE

DATE SIGNED

February 14, 2013

U2 Entered  
Date 3/22/13  
Initial JB

	GREEN	BLUE	CBI
TAB		2	





**Laboratory • Gas Measurement**  
**Emissions Testing • Sample Collection**

29 Country Acres Rd, Riverton, WY 82501 • Toll Free: (866) 985-0866 • E-mail: [Info@Precision-Labs.com](mailto:Info@Precision-Labs.com) • Online: [www.Precision-Labs.com](http://www.Precision-Labs.com)

## ***Laboratory Analytical Report***

Customer Name: Marathon Order ID: 13012404  
Project ID: Wind River UIC Annual Sampling Report Date: 1/25/2013

Lab Sample ID: 13012404-01 Date Time  
Customer Sample ID: PW\_Steamboat\_Butte\_E5 Collection: 1/24/2013 10:05 AM  
Matrix: Aqueous Received: 1/24/2013 12:30 PM

Notes:

Analyses	Result	Units	RL	Qual.	Method	Analysis Date/Time	Analyst
Conductivity	10800	µS/cm	5		SM 2510 B	1/24/2013 1:54:00 PM	KS
pH	6.96	s.u.	0.01		EPA 150.1	1/24/2013 2:02:00 PM	KF
Specific Gravity	1.007	g/cc	0.001		ASTM D 1429-03	1/24/2013 1:50:00 PM	KS
Total Dissolved Solids (TDS) @ 180	8100	mg/L	5		SM 2540 C	1/25/2013 11:59:00 AM	KS

Definitions:

ND-Not Detected at the reporting limit

RL-Analyte Reporting Limit

H-Holding times for preparation or analysis exceeded

S-Spike Recovery outside accepted recovery limits

J-Analyte detected below quantitation limits

M-Matrix Effect

D-Diluted out of recovery limits

L-Analyzed by a contract laboratory

Documentation will be kept for five (5) years.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, DC 20460

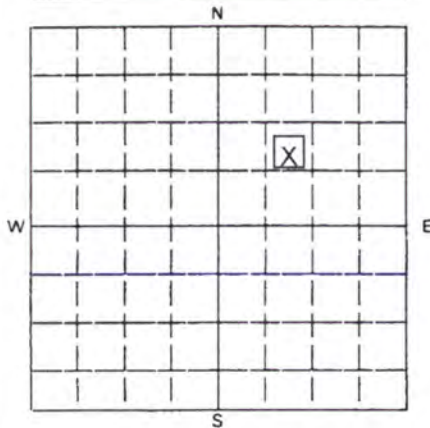
## ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT

NAME AND ADDRESS OF EXISTING PERMITTEE

MARATHON OIL COMPANY  
1501 STAMPEDE AVENUE  
CODY, WYOMING 82414

NAME AND ADDRESS OF SURFACE OWNER

JOINT BUSINESS COUNCIL  
P. O. BOX 217  
FORT WASHAKIE, WY 82514

LOCATE WELL AND OUTLINE UNIT ON  
SECTION PLAT — 640 ACRES

STATE

WY

COUNTY

FREMONT

PERMIT NUMBER

WY2000-02141

SURFACE LOCATION DESCRIPTION

¼ OF SW ¼ OF NE ¼ SECTION 5 TOWNSHIP 3N RANGE 1W

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface

Location 1600 ft. from (N/S) N Line of quarter section (see attachment)  
and 1600 ft. from (E/W) E Line of quarter section

WELL ACTIVITY

- ☐ Brine Disposal  
☒ Enhanced Recovery  
☐ Hydrocarbon Storage

TYPE OF PERMIT

- ☒ Individual  
☐ Area  
Number of Wells \_\_\_\_\_

TRIBAL E 30-T

Lease Name 14-20-0258-06504

Well Number

INJECTION PRESSURE

TOTAL VOLUME INJECTED

TUBING - CASING ANNULUS PRESSURE  
(OPTIONAL MONITORING)

MONTH	YEAR	AVERAGE PSIG	MAXIMUM PSIG	BBL	BWIPD	MINIMUM PSIG	MAXIMUM PSIG
Jan	2011	1,071	1,135	71,909	2,320		0
Feb	2011	1,093	1,148	61,961	2,213		0
Mar	2011	980	1,152	65,835	2,124		0
Apr	2011	962	1,214	63,558	2,119		0
May	2011	1,146	1,258	72,664	2,344		0
Jun	2011	1,286	1,398	61,336	2,045		0
Jul	2011	1,249	1,298	72,588	2,342		0
Aug	2011	1,031	1,299	66,223	2,136		0
Sep	2011	1,079	1,186	60,755	2,025		0
Oct	2011	1,018	1,203	63,850	2,060		0
Nov	2011	1,200	1,333	68,961	2,299		0
Dec	2011	1,279	1,352	76,518	2,468		0

NA=Not Available

## CERTIFICATION

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32).

NAME AND OFFICIAL TITLE (Please type or print)

Tiffany Stebbins  
Adv. Regulatory Compliance Rep.

SIGNATURE

DATE SIGNED

February 14, 2012

	GREEN	BLUE	CBI
TAB		2	

U2 Entered

Date 5/3/12

Initial DB



www.energylab.com  
Analytical Excellence Since 1952

Helena, MT 877-472-0711 • Billings, MT 800-735-4489 • Casper, WY 888-235-0515  
Gillette, WY 866-686-7175 • Rapid City, SD 888-672-1225 • College Station, TX 888-690-2218

## LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

**Client:** Marathon Oil Company

**Project:** Not Indicated

**Lab ID:** C11120876-001

**Client Sample ID:** E5

**Sampled By:** Bryce Gilbert

**Report Date:** 01/18/12

**Collection Date:** 12/29/11 09:10

**Date Received:** 12/30/11

**Matrix:** Aqueous

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
PHYSICAL PROPERTIES							
Specific Gravity 60/60F	1.002	g/cc	H	0.001		Gravimetric	01/13/12 12:00 / ph
Conductivity @ 25 C	11800	umhos/cm		1		A2510 B	01/03/12 15:33 / wc
Solids, Total Dissolved TDS @ 180 C	8400	mg/L	D	35		A2540 C	01/04/12 15:55 / wc

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
H - Analysis performed past recommended holding time.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, DC 20460

## ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT

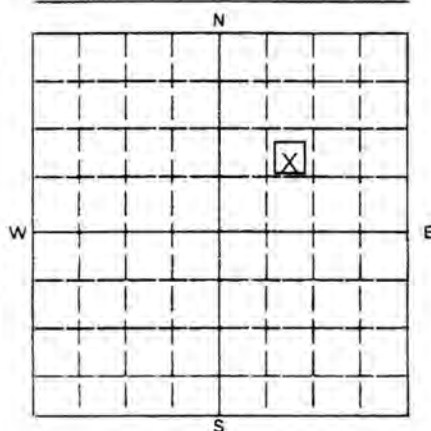
NAME AND ADDRESS OF EXISTING PERMITTEE

MARATHON OIL COMPANY  
1501 STAMPEDE AVENUE  
CODY, WYOMING 82414

NAME AND ADDRESS OF SURFACE OWNER

JOINT BUSINESS COUNCIL  
P. O. BOX 217  
FORT WASHAKIE, WY 82514

LOCATE WELL AND OUTLINE UNIT ON  
SECTION PLAT — 640 ACRES



STATE

WY

COUNTY

FREMONT

PERMIT NUMBER

WY2000-02141

SURFACE LOCATION DESCRIPTION

¼ OF SW ¼ OF NE ¼ SECTION 5 TOWNSHIP 3N RANGE 1W

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface

Location 1600 ft. from (N/S) N Line of quarter section (see attachment)

and 1600 ft. from (E/W) E Line of quarter section

WELL ACTIVITY

☐ Brine Disposal☒ Enhanced Recovery☐ Hydrocarbon Storage

TYPE OF PERMIT

☒ Individual☐ Area

Number of Wells \_\_\_\_\_

TRIBAL E 30-T

Lease Name 14-20-0258-06504

Well Number

INJECTION PRESSURE

TOTAL VOLUME INJECTED

TUBING - CASING ANNULUS PRESSURE

(OPTIONAL MONITORING)

MONTH	YEAR	AVERAGE PSIG	MAXIMUM PSIG	BBL	BWIPD	MINIMUM PSIG	MAXIMUM PSIG
Jan	2010	1,406	1,466	99,007	3,194		0
Feb	2010	1,399	1,437	84,757	3,027		0
Mar	2010	1,380	1,455	90,762	2,928		0
Apr	2010	1,491	1,511	88,905	2,964		0
May	2010	1,390	1,500	81,541	2,630		0
Jun	2010	1,292	1,525	89,415	2,981		0
Jul	2010	1,209	1,390	121,276	3,912		0
Aug	2010	1,497	1,549	91,238	2,943		0
Sep	2010	1,457	1,600	93,695	3,123		0
Oct	2010	1,228	1,299	75,914	2,449		0
Nov	2010	893	918	61,083	2,036		0
Dec	2010	918	1,097	66,338	2,140		0

NA=Not Available

## CERTIFICATION

*I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32).*

NAME AND OFFICIAL TITLE (Please type or print)

R.P. Meabon  
Regulatory Coordinator

SIGNATURE

DATE SIGNED

February 1, 2011

U2 Entered

Date

2/1/11

Initial

RP





# Water Analysis Report

Field : Steamboat	Sample Date : 1/13/2010
County : Fremont	Formation : Nugget water
Location : E-5 Water Injection	Rock Type :
Lab ID : 10011404-02	Depth :
Comments :	

CATIONS	mg/l	meq/l
Potassium	66.8	1.71
Sodium	2,443.2	106.27
Calcium	402.0	20.06
Magnesium	66.4	5.46
Iron	0.1	0.00
Barium	nd	nd
Strontium	nd	nd
<b>SUM +</b>	<b>2,978.5</b>	<b>133.50</b>

ANIONS	mg/l	meq/l
Sulfate	2,865.6	59.66
Chloride	1,895.3	53.46
Carbonate	0.0	0.00
Bicarbonate	946.0	15.51
Bromide	0.0	0.00
Organic Acids	0.0	0.00
Hydroxide	0.0	0.00
<b>SUM -</b>	<b>5,706.9</b>	<b>128.63</b>

## Solids

Total Dissolved Solids @180°C	7,640 mg/l
Total Solids, Calc less CO <sub>2</sub>	8,118 mg/l
Total Solids, Calculated	8,212 mg/l
Total Solids, NaCl equivalents	6,343 mg/l
Chloride as NaCl	3,124 mg/l
NaCl% of Total Dissolved Solids	40.89 %
Accuracy	-2.32 Sigma

## Sample Conditions

pH, s.u. (Field)	7.48 s.u.
Sample Pressure	14.70 psia
Mole% CO <sub>2</sub> Gas	2.11 %
pH, s.u. (from CO <sub>2</sub> )	7.48 s.u.
Surface Temp	70 °F
Downhole Temp	120 °F
Ionic Strength	0.175 μ

## Dissolved Gases

Bisulfide ion, HS <sup>-</sup>	141.5 mg/l
Hydrogen Sulfide, H <sub>2</sub> S	51.5 mg/l
Total Sulfide	193.0 mg/l

Dissolved O <sub>2</sub> , aq	0.0 ppb
Measured CO <sub>2</sub> , aq	123.0 mg/l
Calculated CO <sub>2</sub> , aq	123.0 mg/l

## Other Properties

Calcium Hardness as CaCO <sub>3</sub>	1,003.8 mg/l
Magnesium Hardness as CaCO <sub>3</sub>	273.2 mg/l
Total Hardness as CaCO <sub>3</sub>	1,277.0 mg/l
Hardness, grains	74.36 grains/gallon

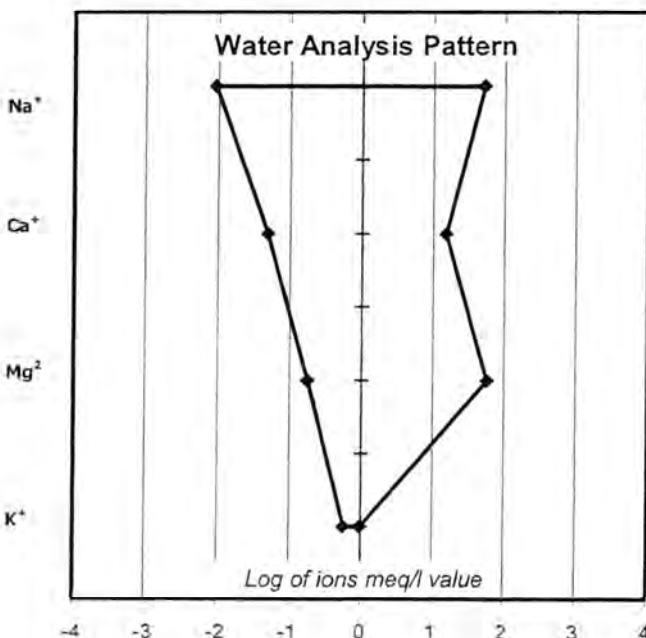
Specific Gravity	1.009 measured
Specific Gravity	1.006 calculated
Resistivity, 68°F	0.969 ohm-cm
Conductivity 25°C	10,320 μmhos/cm

## Microbiological

Sulfate Reducing	nd
Aerobic Bacteria	nd

## Scaling Conditions

Calcium Carbonate	CaCO <sub>3</sub> +
Calcium Sulfate	CaSO <sub>4</sub> - - -
Barium Sulfate	BaSO <sub>4</sub> -
Strontium Sulfate	SrSO <sub>4</sub> -



## Probable Mineral Residue, Dry

Calculation error = -3.8 %

COMPOUND	mg/l
Na <sub>2</sub> SO <sub>4</sub>	3,507.9
NaCl	3,124.3
Ca(HCO <sub>3</sub> ) <sub>2</sub>	1,236.2
MgSO <sub>4</sub>	328.7
CaSO <sub>4</sub>	327.3

## Radionuclides, Method E903.0

Radium 226	N/A	pCi/L
R226 precision (±)	N/A	pCi/L
Radium 228	N/A	pCi/L
R228 precision (±)	N/A	pCi/L

Note: nd denotes 'Not Determined'

Analyzed : Precision Analysis Approved : MDCar

1-Sep-05

v951 Michael D Carney

# Mechanical Integrity Test

## Casing or Annulus Pressure Mechanical Integrity Test

U.S. Environmental Protection Agency  
Underground Injection Control Program, UIC Direct Implementation Program 8P-W-GW  
999 18<sup>th</sup> Street, Suite 500 Denver, CO 80202-2466

EPA Witness: \_\_\_\_\_ Date: 10 / 27 / 2010

Test conducted by: LINDY SHONGUTSIE (DRY CREEK)

Others present: ERICK NAVAS (MOC), WAYNE CHRISTIANSEN (R+S WELL SERVICES)

Well Name: <u>Tribal 'E' #30 (WY2000 - 02141)</u>		Type: <u>ER</u> SWD	Status: <u>AC</u> TA UC
Field: <u>STEAMBOAT</u>			
Location: <u>SW NE</u>	Sec: <u>5</u>	T <u>3N</u> N/S R <u>1W</u> E/W	County: <u>FREMONT</u> State: <u>WY</u>
Last MIT: <u>07 / 13 / 2005</u>		Maximum Allowable Pressure: <u>1830</u> PSIG	

Is this a regularly scheduled test? ☒ Yes ☐ No

Initial test for permit? ☐ Yes ☐ No

Test after well rework? ☐ Yes ☐ No

Well injection during test? ☒ Yes ☐ No

If Yes, rate: 2,493 bpd

Pre-test casing/tubing annulus pressure: 0 psig

U2 Entered

Date 12/6/10

Initial JS

MIT DATA TABLE		TEST #1		TEST #2		TEST #3	
TUBING		PRESSURE					
Initial Pressure		<u>1,100</u>	psig		psig		psig
End of test pressure		<u>1,100</u>	psig		psig		psig
CASING / TUBING		ANNULUS		PRESSURE			
0 minutes		<u>1,005</u>	psig		psig		psig
5 minutes		<u>1,005</u>	psig		psig		psig
10 minutes		<u>1,005</u>	psig		psig		psig
15 minutes		<u>1,005</u>	psig		psig		psig
20 minutes		<u>1,002</u>	psig		psig		psig
25 minutes		<u>1,002</u>	psig		psig		psig
30 minutes		<u>1,002</u>	psig		psig		psig
minutes			psig		psig		psig
minutes			psig		psig		psig
RESULTS		<input checked="" type="checkbox"/> Pass	<input type="checkbox"/> Fail	<input type="checkbox"/> Pass	<input type="checkbox"/> Fail	<input type="checkbox"/> Pass	<input type="checkbox"/> Fail

Does the annulus pressure build back up after the test? ☐ Yes ☒ No

	GREEN	BLUE	CBI
TAB		<u>2</u>	

## MECHANICAL INTEGRITY PRESSURE TEST

**Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc. :**

**Signature of Witness:**

Ersk C. Norris, July 1892,  
Wayne Christianville

## OFFICE USE ONLY – COMPLIANCE FOLLOW-UP

Staff: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Do you agree with the reported test results?      ☐ YES      ☐ NO

If not, why? \_\_\_\_\_

Possible violation identified? ☐ YES ☐ NO

If YES, what: \_\_\_\_\_

IF YES, follow-up initiated? [ ] YES \_\_\_\_\_

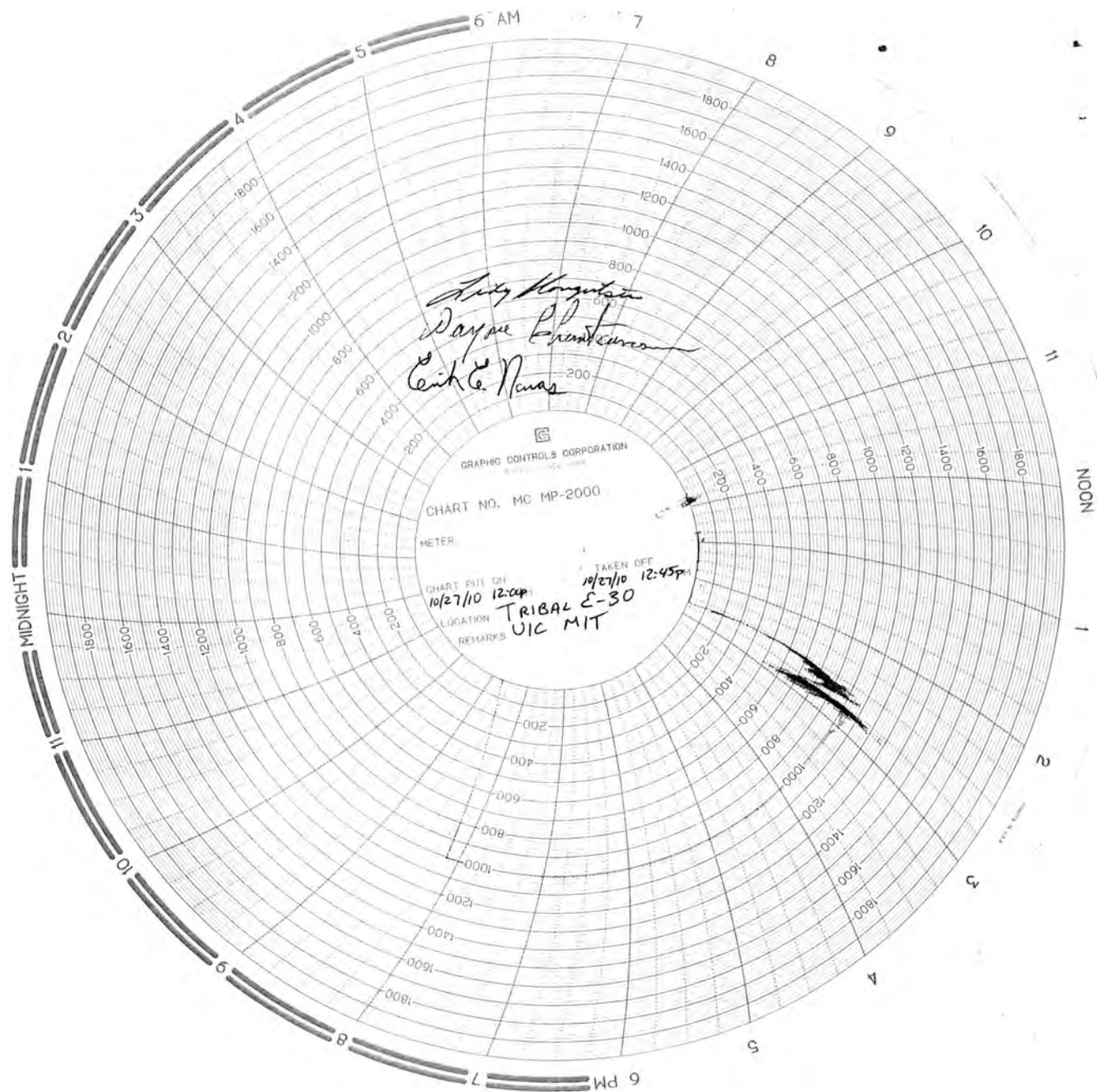
[ ] NO - why not? \_\_\_\_\_

## [ ] Data Entry

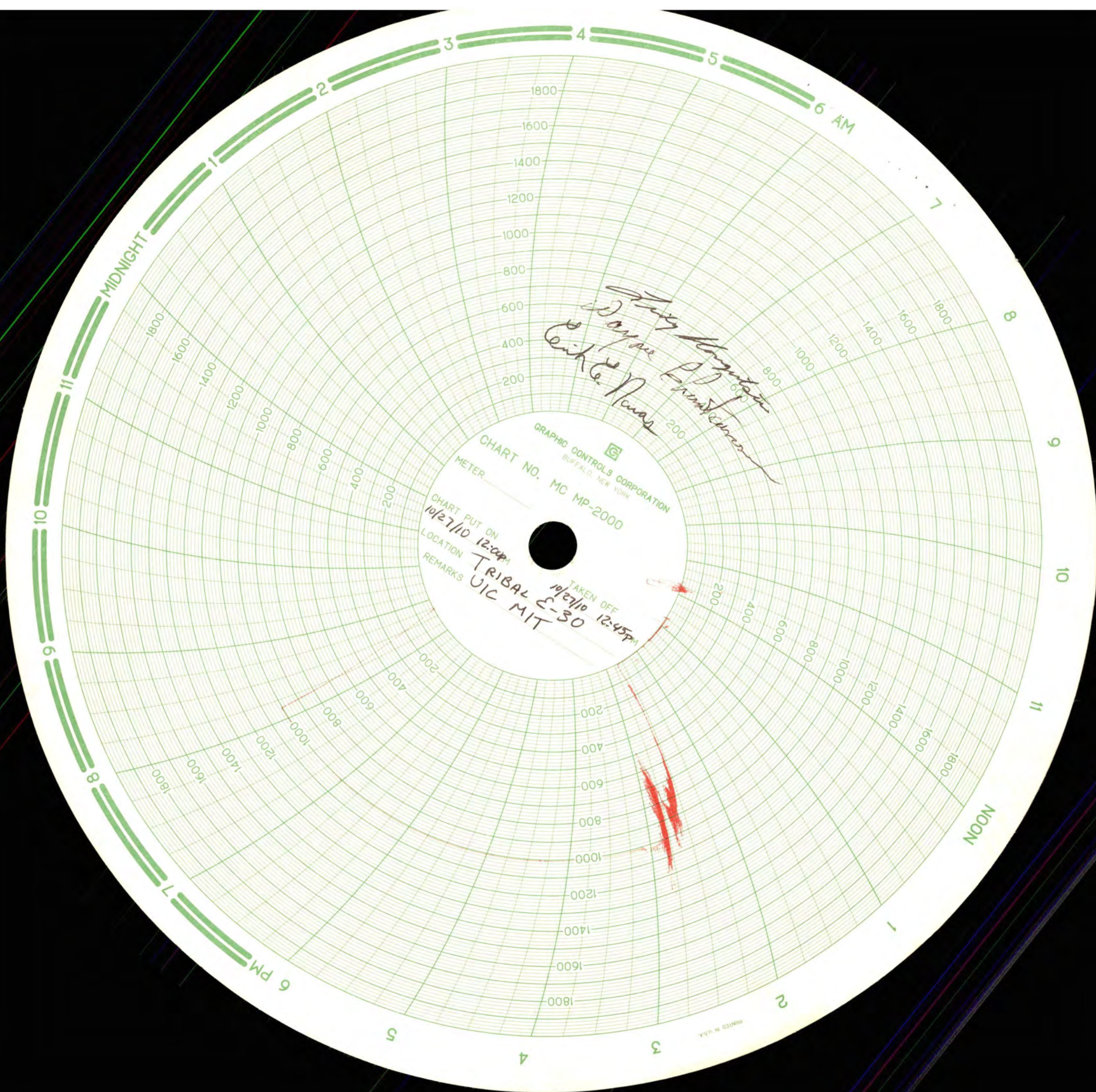
☐ Compliance Staff

[ ] **2<sup>nd</sup> Data Entry**

☐ **Hardcopy Filing**











1501 Stampede Avenue  
Cody, WY 82414  
Telephone 307/587-4961

November 16, 2010

Sarah Roberts  
Mail Code: 8ENF-UFO  
United States Environmental Protection Agency  
Region 8  
1595 Wynkoop Street  
Denver, CO 80202-1129

RECEIVED  
NOV 18 2010  
Division of Enforcement  
Compliance & Environmental Justice

**RE: UIC Notice of Violations to Timely Demonstrate Mechanical Integrity (9 wells);  
Inaccurate Gauge; and Failure to Monitor Temporarily Abandoned Well in the  
Steamboat Butte and Circle Ridge Oilfields, Fremont County, WY**

Dear Ms Roberts:

Marathon Oil Company is in receipt of your letter dated November 4, 2010 (attached)  
and submits the following information for your review:

**Failure to Timely demonstrate Mechanical Integrity for 9 wells:**

Attached please find the EPA Mechanical Integrity Test for the following wells:

- 1) Shoshone 65-29 WY2000-02173
- 2) Tribal 'E' # 30 WY2000-02141 (additional well tested)
- 3) Tribal 'C' # 28 WY2825-04382
- 4) Tribal 'E' # 26 WY02839-02129
- 5) Shoshone 65-26 WY2000-02171
- 6) Shoshone 65-70 WY02708-02176
- 7) Shoshone 65-12 WY2000-02167
- 8) Shoshone 63-44 WY2000-02155
- 9) Shoshone 65-28 WY02710-02172
- 10) Shoshone 65-33 WY02707-02174 (additional well tested)

	GREEN	BLUE	CBI
TAB		2	

**Shoshone 65-40** – This well was one the list which accompanied your letter dated November 4, 2010. During a routine MIT pre-test, Shoshone 65-40 failed to maintain the required pressure and was shut-in on October 25, 2010. Additional tests were attempted to insure that the correct procedures were utilized and the well remains shut-in until such time the downhole equipment can be pulled and examined. Marathon will submit a plan to the EPA and the BLM prior to initiating any work on this well.

#### **Brinkerhoff # 4**

During the EPA routine inspection on October 19, 2010, Brinkerhoff # 4, currently a temporarily abandoned well was not being monitored as required by EPA rules. Marathon has added this well to the weekly monitoring list.

#### **Inaccurate Gauge**

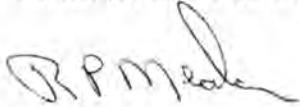
The gauge which was observed on the Tribal 'S' # 1 well during the field inspection is placed on the well for observation purposes only. The gauge remains on the well and is checked daily as a reference for any pressure changes. The field operators utilize a separate calibrated gauge (calibrated quarterly) for recording and reporting purposes.

Marathon Oil Company is fully committed to complying with all rules and regulations and is reviewing the processes in place to insure that the compliance issues noted in your letter dated November 4, 2010 are properly addressed and do not occur in the future.

Thank you for your patience and assistance concerning this matter. If we may answer any questions or be of any further assistance, please feel free to contact this office.

Sincerely,

MARATHON OIL COMPANY



R.P. Meabon  
Regulatory Coordinator  
Rocky Mountain Operations  
307-527-2133



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, DC 20460

## ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT

NAME AND ADDRESS OF EXISTING PERMITTEE

MARATHON OIL COMPANY  
1501 STAMPEDE AVENUE  
CODY, WYOMING 82414

NAME AND ADDRESS OF SURFACE OWNER

JOINT BUSINESS COUNCIL  
P. O. BOX 217  
FORT WASHAKIE, WY 82514

LOCATE WELL AND OUTLINE UNIT ON  
SECTION PLAT — 640 ACRES

STATE

WY

COUNTY

FREMONT

PERMIT NUMBER

WY2000-02141

SURFACE LOCATION DESCRIPTION

1/4 OF SW 1/4 OF NE 1/4 SECTION 5 TOWNSHIP 3N RANGE 1W

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface

Location 1600 ft. from (N/S) N Line of quarter section (see attachment)

and 1600 ft. from (E/W) E Line of quarter section

WELL ACTIVITY

TYPE OF PERMIT

☐ Brine Disposal☒ Individual☒ Enhanced Recovery☐ Area☐ Hydrocarbon Storage

Number of Wells \_\_\_\_\_

TRIBAL E 30-T

Lease Name 14-20-0258-06504

Well Number

INJECTION PRESSURE

TOTAL VOLUME INJECTED

TUBING - CASING ANNULUS PRESSURE

(OPTIONAL MONITORING)

MONTH	YEAR	AVERAGE PSIG	MAXIMUM PSIG	BBL	BWPD	MINIMUM PSIG	MAXIMUM PSIG
Jan	2009	1,309	1,350	80,411	2,594		0
Feb	2009	1,294	1,350	84,876	3,031		0
Mar	2009	1,175	1,300	102,830	3,317		0
Apr	2009	1,090	1,100	85,239	2,841		0
May	2009	1,017	1,050	79,953	2,579		0
Jun	2009	1,005	1,025	81,466	2,716		0
Jul	2009	969	1,000	87,946	2,837		0
Aug	2009	1,085	1,416	96,545	3,114		0
Sep	2009	1,353	1,450	90,172	3,006		0
Oct	2009	1,443	1,450	102,999	3,323		0
Nov	2009	1,430	1,475	90,531	3,018		0
Dec	2009	1,430	1,466	103,527	3,340		0

NA=Not Available

## CERTIFICATION

*I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32).*

NAME AND OFFICIAL TITLE (Please type or print)

R.P. Meabon  
Regulatory Coordinator

SIGNATURE

DATE SIGNED

February 1, 2010

GREEN	BLUE	RED
	2	

U2 Entered

Date 2-13-10

Initial [Signature]





# Water Analysis Report

Field : Circle Ridge	Sample Date : 2/1/2010
County : Fremont	Formation :
Location : Circle Ridge Water Injection	Rock Type :
Lab ID : 10020103-01	Depth :
Comments :	

CATIONS	mg/l	meq/l	ANIONS	mg/l	meq/l
Potassium	11.4	0.29	Sulfate	63.4	1.32
Sodium	70.0	3.05	Chloride	28.7	0.81
Calcium	133.2	6.65	Carbonate	0.0	0.00
Magnesium	45.4	3.74	Bicarbonate	487.0	7.98
Iron	0.0	0.00	Bromide	0.0	0.00
Barium	1.6	0.02	Organic Acids	0.0	0.00
Strontium	4.4	0.10	Hydroxide	0.0	0.00
SUM +	266.0	13.85	SUM -	579.1	10.11

## Solids

Total Dissolved Solids @180°C	642 mg/l
Total Solids, Calc less CO <sub>2</sub>	553 mg/l
Total Solids, Calculated	602 mg/l
Total Solids, NaCl equivalents	451 mg/l
Chloride as NaCl	47 mg/l
NaCl% of Total Dissolved Solids	7.37 %
Accuracy	-14.21 Sigma

## Sample Conditions

pH, s.u. (Field)	7.03 s.u.
Sample Pressure	14.70 psia
Mole% CO <sub>2</sub> Gas	1.67 %
pH, s.u. (from CO <sub>2</sub> )	7.39 s.u.
Surface Temp	70 °F
Downhole Temp	120 °F
Ionic Strength	0.018 μ

## Dissolved Gases

Bisulfide ion, HS <sup>-</sup>	nd
Hydrogen Sulfide, H <sub>2</sub> S	nd
Total Sulfide	nd

Dissolved O <sub>2</sub> , aq	0.0 ppb
Measured CO <sub>2</sub> , aq	nd
Calculated CO <sub>2</sub> , aq	24.6 mg/l

## Other Properties

Calcium Hardness as CaCO <sub>3</sub>	332.6 mg/l
Magnesium Hardness as CaCO <sub>3</sub>	187.4 mg/l
Total Hardness as CaCO <sub>3</sub>	520.0 mg/l
Hardness, grains	30.28 grains/gallon

Specific Gravity	1.003 measured
Specific Gravity	1.001 calculated
Resistivity, 68°F	9.506 ohm-cm
Conductivity 25°C	1,052 μmhos/cm

## Microbiological

Sulfate Reducing	nd
Aerobic Bacteria	nd

## Scaling Conditions

Calcium Carbonate	CaCO <sub>3</sub> +
Calcium Sulfate	CaSO <sub>4</sub> - - -
Barium Sulfate	BaSO <sub>4</sub> +
Strontium Sulfate	SrSO <sub>4</sub> -

## Probable Mineral Residue, Dry

Calculation error = -37 %

COMPOUND	mg/l
Ca(HCO <sub>3</sub> ) <sub>2</sub>	538.7
Mg(HCO <sub>3</sub> ) <sub>2</sub>	88.2
MgSO <sub>4</sub>	72.0
MgCl <sub>2</sub>	38.5
SrSO <sub>4</sub>	9.2
BaSO <sub>4</sub>	2.7

## Radionuclides, Method E903.0

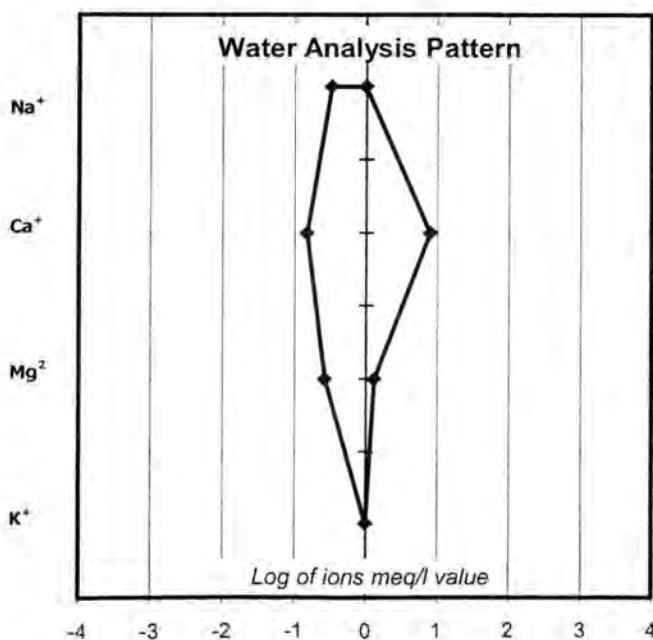
Radium 226	nd
R226 precision (±)	nd
Radium 228	nd
R228 precision (±)	nd

Note: nd denotes 'Not Determined'

Analyzed : Precision Analysis Approved : MDCarri

1-Sep-05

v951 Michael D Carney




 UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
 WASHINGTON, DC 20460

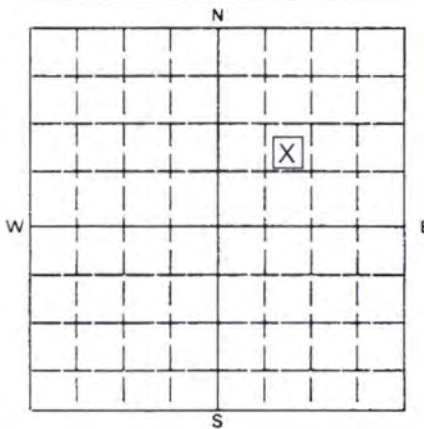
**ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT**

NAME AND ADDRESS OF EXISTING PERMITTEE

 MARATHON OIL COMPANY  
 1501 STAMPEDE AVENUE  
 CODY, WYOMING 82414

NAME AND ADDRESS OF SURFACE OWNER

 JOINT BUSINESS COUNCIL  
 P. O. BOX 217  
 FORT WASHAKIE, WY 82514

 LOCATE WELL AND OUTLINE UNIT ON  
 SECTION PLAT --- 640 ACRES


STATE

WY

COUNTY

FREMONT

PERMIT NUMBER

WY2000-02141

SURFACE LOCATION DESCRIPTION

1/4 OF SW 1/4 OF NE 1/4 SECTION 5 TOWNSHIP 3N RANGE 1W

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface

Location 1600 ft. from (N/S) N Line of quarter section (see attachment)

and 1600 ft. from (E/W) E Line of quarter section WY20000-02141

WELL ACTIVITY

- ☐ Brine Disposal  
☒ Enhanced Recovery  
☐ Hydrocarbon Storage

TYPE OF PERMIT

☒ Individual

☐ Area

Number of Wells \_\_\_\_\_

TRIBAL E 30-T

Lease Name 14-20-0258-06504

Well Number

INJECTION PRESSURE

TOTAL VOLUME INJECTED

TUBING - CASING ANNULUS PRESSURE

(OPTIONAL MONITORING)

MONTH	YEAR	AVERAGE PSIG	MAXIMUM PSIG	BBL	BWIPD	MINIMUM PSIG	MAXIMUM PSIG
Jan	2008	833	1,009	42,696	1,377		0
Feb	2008	831	875	35,914	1,238		0
Mar	2008	1,155	1,325	56,783	1,832		0
Apr	2008	966	1,225	60,500	2,017		0
May	2008	811	825	84,284	2,719		0
Jun	2008	849	900	84,476	2,816		0
Jul	2008	825	930	80,610	2,600		0
Aug	2008	913	950	80,044	2,582		0
Sep	2008	960	1,000	74,981	2,499		0
Oct	2008	813	1,000	70,833	2,285		0
Nov	2008	854	875	98,986	3,300		0
Dec	2008	1,365	1,400	86,947	2,805		0

NA=Not Available

**CERTIFICATION**

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32).

NAME AND OFFICIAL TITLE (Please type or print)

 R.P. Meabon  
 Regulatory Coordinator

SIGNATURE

DATE SIGNED

February 2, 2009

EPA Form 7520-11 (2-84)

 RECEIVED  
 FEB 10 2009

 Office of Enforcement  
 Compliance & Environmental Justice

 JZ Entered  
 Date Feb. 17, 2009  
 Initial

	GREEN	BLUE	CBI
TAB		3	



**Marathon  
Oil Company**

1501 Stampede Avenue  
Cody, WY 82414  
Telephone 307/587-4961

February 5, 2008

US Environmental Protection Agency, Region 8  
1595 Wynkoop Street  
Denver, Colorado 80202  
Attention: Mr. Nathan Wiser  
Mail Code 8ENF-UFO

**RE: 2008 Annual Reports  
Steamboat Butte Field  
Circle Ridge Field  
Wind River Indian Reservation**

**RECEIVED**

**FEB 10 2009**

Office of Enforcement  
Compliance & Environmental Justice

Dear Mr. Wiser,

Enclosed with this letter are the annual injection reports for Environmental Protection Agency primacy injection wells operated by Marathon Oil Company and water analysis for the above mentioned fields.

Should you have any questions, please contact me at the above address or phone (307)527-2133.

Sincerely,

MARATHON OIL COMPANY

A handwritten signature in black ink, appearing to read 'R.P. Meabon'.

R.P. Meabon  
Regulatory Coordinator  
Rocky Mountain Operations  
307-527-2133

RPM/rpm  
Annua2003.doc  
Attachments

CC: CFR, RPM, Steamboat Field File





## QA/QC Summary Report

Client: Marathon Oil Company  
Project: Wind River Reservation UIC Program

Report Date: 12/29/08  
Work Order: C08120061

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2510 B					Analytical Run: ORION555A_081202A				
Sample ID: ICV2_081202_1	Initial Calibration Verification Standard								12/02/08 13:20
Conductivity	1430	umhos/cm	1.0	101	90	110			
Method: A2510 B					Batch: 081202_1_PH-W_555A-1				
Sample ID: MBLK1_081202_1	Method Blank								12/02/08 13:17
Conductivity	0.8	umhos/cm	0.2						
Sample ID: C08120061-001ADUP	Sample Duplicate								12/02/08 13:48
Conductivity	1100	umhos/cm	1.0				0.1	10	
Sample ID: C08120061-003ADUP	Sample Duplicate								12/02/08 13:55
Conductivity	10600	umhos/cm	1.0				0.4	10	
Method: A2540 C					Batch: 081203_1_SLDS-TDS-W				
Sample ID: MBLK1_081203	Method Blank								12/03/08 10:42
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	6						
Sample ID: LCS1_081203	Laboratory Control Sample								12/03/08 10:42
Solids, Total Dissolved TDS @ 180 C	984	mg/L	10	98	90	110			
Sample ID: C08120049-001AMS	Sample Matrix Spike								12/03/08 10:43
Solids, Total Dissolved TDS @ 180 C	2200	mg/L	10	100	90	110			
Sample ID: C08120049-001AMSD	Sample Matrix Spike Duplicate								12/03/08 10:43
Solids, Total Dissolved TDS @ 180 C	2200	mg/L	10	99	90	110	0.2	10	
Sample ID: C08120088-001AMS	Sample Matrix Spike								12/03/08 10:48
Solids, Total Dissolved TDS @ 180 C	16800	mg/L	10	101	90	110			
Sample ID: C08120088-001AMSD	Sample Matrix Spike Duplicate								12/03/08 10:48
Solids, Total Dissolved TDS @ 180 C	16700	mg/L	10	99	90	110	0.7	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## ANALYTICAL SUMMARY REPORT

December 29, 2008

Marathon Oil Company  
1501 Stampede Ave  
Cody, WY 82414

Workorder No.: C08120061

Project Name: Wind River Reservation UIC Program

Energy Laboratories, Inc. received the following 3 samples for Marathon Oil Company on 12/2/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C08120061-001	Circle Ridge	12/01/08 13:15	12/02/08	Aqueous	Conductivity Specific Gravity Solids, Total Dissolved
C08120061-002	C-1 Steamboat Butte	12/01/08 14:00	12/02/08	Aqueous	Same As Above
C08120061-003	E-5 Steamboat Butte	12/01/08 14:15	12/02/08	Aqueous	Same As Above

As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By:

*Stephanie Waldrup*



ENERGY LABORATORIES, INC. • 2393 Salt Creek Highway (82601) • P.O. Box 3258 • Casper, WY 82602  
Toll Free 888.235.0515 • 307.235.0515 • Fax 307.234.1639 • casper@energylab.com • www.energylab.com

## LABORATORY ANALYTICAL REPORT

**Client:** Marathon Oil Company  
**Project:** Wind River Reservation UIC Program  
**Lab ID:** C08120061-001  
**Client Sample ID:** Circle Ridge  
**Sampled By:** Not Provided

**Report Date:** 12/29/08  
**Collection Date:** 12/01/08 13:15  
**Date Received:** 12/02/08  
**Matrix:** Aqueous

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
PHYSICAL PROPERTIES							
Conductivity	1100	umhos/cm		1		A2510 B	12/02/08 13:46 / dd
Solids, Total Dissolved TDS @ 180 C	636	mg/L		10		A2540 C	12/03/08 10:45 / dd
Specific Gravity 60/60F	1.000	g/cc				Calculation	12/07/08 12:51 / sec

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



## LABORATORY ANALYTICAL REPORT

**Client:** Marathon Oil Company  
**Project:** Wind River Reservation UIC Program  
**Lab ID:** C08120061-002  
**Client Sample ID:** C-1 Steamboat Butte  
**Sampled By:** Not Provided

**Report Date:** 12/29/08  
**Collection Date:** 12/01/08 14:00  
**Date Received:** 12/02/08  
**Matrix:** Aqueous

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
PHYSICAL PROPERTIES							
Conductivity	7090	umhos/cm		1		A2510 B	12/02/08 13:51 / dd
Solids, Total Dissolved TDS @ 180 C	4920	mg/L		10		A2540 C	12/03/08 10:46 / dd
Specific Gravity 60/60F	1.003	g/cc				Calculation	12/07/08 12:51 / sec

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



## LABORATORY ANALYTICAL REPORT

**Client:** Marathon Oil Company  
**Project:** Wind River Reservation UIC Program  
**Lab ID:** C08120061-003  
**Client Sample ID:** E-5 Steamboat Butte  
**Sampled By:** Not Provided

**Report Date:** 12/29/08  
**Collection Date:** 12/01/08 14:15  
**Date Received:** 12/02/08  
**Matrix:** Aqueous

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
PHYSICAL PROPERTIES							
Conductivity	10700	umhos/cm		1		A2510 B	12/02/08 13:53 / dd
Solids, Total Dissolved TDS @ 180 C	7590	mg/L		10		A2540 C	12/03/08 10:46 / dd
Specific Gravity 60/60F	1.005	g/cc				Calculation	12/07/08 12:51 / sec

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, DC 20460

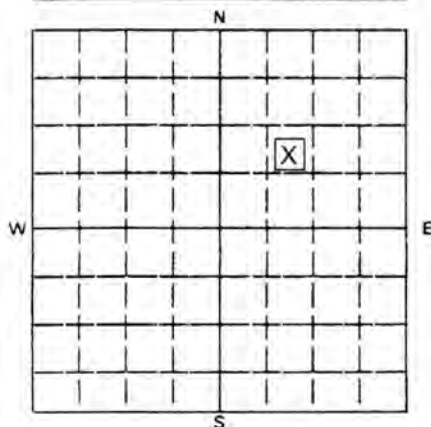
## ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT

NAME AND ADDRESS OF EXISTING PERMITTEE

MARATHON OIL COMPANY  
1501 STAMPEDE AVENUE  
CODY, WYOMING 82414

NAME AND ADDRESS OF SURFACE OWNER

JOINT BUSINESS COUNCIL  
P. O. BOX 217  
FORT WASHAKIE, WY 82514

LOCATE WELL AND OUTLINE UNIT ON  
SECTION PLAT — 640 ACRES

STATE

WY

COUNTY

FREMONT

PERMIT NUMBER

WY2000-02141

SURFACE LOCATION DESCRIPTION

1/4 OF SW 1/4 OF NE 1/4 SECTION 5 TOWNSHIP 3N RANGE 1W

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface

Location 1600 ft. from (N/S) N Line of quarter section (see attachment)

and 1600 ft. from (E/W) E Line of quarter section

WELL ACTIVITY

- ☐ Brine Disposal  
☒ Enhanced Recovery  
☐ Hydrocarbon Storage

TYPE OF PERMIT

☒ Individual☐ Area

Number of Wells \_\_\_\_\_

TRIBAL E 30-T

Lease Name 14-20-0258-06504

Well Number

INJECTION PRESSURE

TOTAL VOLUME INJECTED

TUBING - CASING ANNULUS PRESSURE

(OPTIONAL MONITORING)

MONTH	YEAR	AVERAGE PSIG	MAXIMUM PSIG	BBL	BWIPD	MINIMUM PSIG	MAXIMUM PSIG
Jan	2007	1,259	1,304	72,563	2,341		0
Feb	2007	1,312	1,400	68,124	2,433		0
Mar	2007	1,237	1,302	62,148	2,005		0
Apr	2007	1,155	1,300	58,728	1,958		0
May	2007	1,149	1,202	65,789	2,122		0
Jun	2007	1,165	1,204	63,511	2,117		0
Jul	2007	1,050	1,152	62,432	2,014		0
Aug	2007	789	943	57,717	1,862		0
Sep	2007	982	1,101	57,210	1,907		0
Oct	2007	948	1,062	61,289	1,977		0
Nov	2007	975	1,048	53,725	1,791		0
Dec	2007	879	882	47,478	1,532		0

NA=Not Available

## CERTIFICATION

*I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32).*

NAME AND OFFICIAL TITLE (Please type or print)

R.P. Meabon  
Regulatory Coordinator

SIGNATURE

DATE SIGNED

January 14, 2008

RECEIVED

FEB 08 2008

Office of Enforcement  
Compliance & InvestigationsU2 Entered  
Date 02/08/08

Initial



## LABORATORY ANALYTICAL REPORT

Client: Marathon Oil Co  
Project: Wind River Reservation UIC Program  
Lab ID: C07100818-001  
Client Sample ID: Steamboat Butte Water Inj. Plant  
Sampled By: CR

Report Date: 10/26/07  
Collection Date: 10/15/07 15:10  
Date Received: 10/16/07  
Matrix: Aqueous

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
PHYSICAL PROPERTIES							
Specific Gravity 60/60F	1.005	g/cc		0.001		Gravimetric	10/23/07 13:42 / cjs
Conductivity	6540	umhos/cm		1.0		A2510 B	10/16/07 14:53 / jf
Solids, Total Dissolved TDS @ 180 C	4510	mg/L		10		A2540 C	10/17/07 13:38 / bas

RECEIVED

FEB 08 2008

Office of Enforcement  
Compliance & Environmental  
Justice

U2 Entered  
Date 02/08/08  
Initial [Signature]

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



1501 Stampede Avenue  
Cody, WY 82414  
Telephone 307/587-4961

RECEIVED  
FEB 11 2008  
U.S. ENVIRONMENTAL PROTECTION AGENCY

February 5, 2008

US Environmental Protection Agency, Region 8  
1595 Wynkoop Street  
Denver, Colorado 80202  
Attention: Mr. Nathan Wiser  
Mail Code 8ENF-UFO

**RE: 2007 Annual Reports  
Steamboat Butte Field  
Circle Ridge Field  
Wind River Indian Reservation**

Dear Mr. Wiser,

Enclosed with this letter are the annual injection reports for Environmental Protection Agency primacy injection wells operated by Marathon Oil Company and water analysis for the above mentioned fields.

Should you have any questions, please contact me at the above address or phone (307)527-2133.

Sincerely,

MARATHON OIL COMPANY

A handwritten signature in black ink, appearing to read 'R.P. Meabon'.

R.P. Meabon  
Regulatory Coordinator  
Rocky Mountain Operations  
307-527-2133

RPM/rpm  
Annua2003.doc  
Attachments

CC: CFR, RPM, Steamboat Field File



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8

1595 Wynkoop Street  
DENVER, CO 80202-1129  
Phone 800-227-8917  
<http://www.epa.gov/region08>

January 11, 2008

Ref: 8ENF-UFO

Mr. Randy Meabon  
Regulatory Coordinator  
Marathon Oil Company  
1501 Stampede Ave., P.O. Box 2690  
Cody, WY 82414

Re: UNDERGROUND INJECTION CONTROL (UIC)  
Courtesy Reminder to Submit Annual Injection  
Well Monitoring Report and Fluid Analysis;  
Note of Change of EPA Address

Dear Mr. Meabon:

The purpose of this letter is to again to remind Class II injection well operators about their annual reporting requirements, and to inform all Class II injection well operators about our new mailing address.

**First**, this is courtesy reminder to all Class II injection well operators to comply with certain annual reporting requirements. Specifically, I am reminding you to submit your annual monitoring reports, and as applicable, a chemical analysis of injected fluids. Enclosed is a blank annual monitoring report form and accompanying instructions. This form is also on-line at the EPA UIC program's newly updated website <http://www.epa.gov/safewater/uic/index.html>. If required by permit, please remember to submit a chemical analysis representative of fluid injected during 2007 unless no injection occurred during 2007. The due date for submission of annual monitoring reports, and as applicable, chemical analyses is **February 15, 2008**.

As in years past, this letter is being sent to operators under the jurisdiction of the U.S. EPA Region 8 program as a courtesy. Given possible reduction in resources in the future, this courtesy reminder letter may not be possible, but would not affect your duty to comply with these requirements.

**Second**, EPA Region 8 is pleased to announce the relocation of our Regional Headquarters Office to our new downtown Denver facility. The Regional moved to this new office building effective January 2007. Please make note that all mail, FedEx and UPS shipments should be sent to our new physical street and mailing address:



**US EPA Region 8  
1595 Wynkoop Street  
Denver, CO 80202-1129.**

Failure to comply with a UIC permit or the UIC regulations found at 40 CFR Parts 144 through 148 constitutes one or more violations of the Safe Drinking Water Act, 42 U.S.C. §300h. Such non-compliance may subject you to formal enforcement by EPA, as codified at 40 CFR Part 22.

If you have any questions about matters raised in this letter, please feel free to contact Nathan Wiser of my staff at (303) 312-6211. The fax number for the UIC Program's Technical Enforcement Program has been changed to **(303) 312-6953**.

Sincerely,



Mark A.R. Chalfant  
Director  
Technical Enforcement Program

- Enclosures:
1. Blank Form 7520-11 (Annual Disposal/Injection Well Monitoring Report)
  2. Instructions for Class II well reporting
  3. Print out of injection wells from EPA's UIC database for Class II operators

## **ENCLOSURE - Instructions for Class II Well Reporting**

This enclosure is accompanied by a recent print-out from EPA's Region 8 UIC database displaying the Marathon Oil Company injection wells to which the reporting requirements generally apply. There may be additional reporting requirements established in an existing UIC permit. If so, then you must also follow those UIC permit requirements. While meant to be helpful and complete, this print-out may not reflect each and every injection well for which Marathon Oil Company is responsible.

### **Instructions for Completing EPA Form 7520-11 (Annual Disposal/Injection Well Monitoring Report)**

1. Complete a separate form for each well, and write the EPA permit/ID number on each.
2. A form must be submitted for any injection well with an unplugged status at any point during the reporting period (calendar year 2007), including those wells which may have been transferred to or from another company at some point during the reporting period. This specifically includes injection wells that have not been used for injection but once were.
3. When completing this form, insert only actual numeric values into the columns, rather than leaving them blank. Do not use marks like " - " or " \* " to substitute for the value zero. A well that has been temporarily abandoned must still be periodically observed and pressure and rate values recorded.
4. All monthly values must be filled in and must be actual observed values. Further, please report the maximum observed injection pressure, not just the average injection pressure, for each month in the reporting period. Injection well permits will dictate whether you must submit observations of annulus pressures.
5. Each completed form must be signed and dated.
6. The due date for annual monitoring reports is February 15, 2008.

### **Instructions for Submitting a Chemical Analysis (There is no EPA form for this)**

1. If required by permit and if there was fluid injected during 2007, a chemical analysis representative of fluid injected during 2007 must be submitted. Permit conditions typically require an analysis for at least pH, total dissolved solids, specific conductivity and specific gravity. Check your UIC permit(s) for further information. Include the EPA permit/ID number(s) with each applicable analysis.
2. The due date for chemical analysis reports is February 15, 2008.

Send all reporting to the following address:



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

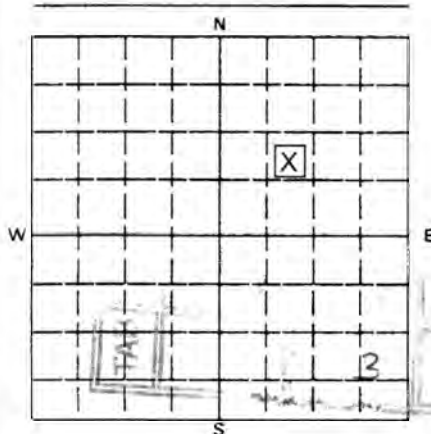
# ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT

NAME AND ADDRESS OF EXISTING PERMITTEE

MARATHON OIL COMPANY  
1501 STAMPEDE AVENUE  
CODY, WYOMING 82414

NAME AND ADDRESS OF SURFACE OWNER

JOINT BUSINESS COUNCIL  
P. O. BOX 217  
FORT WASHAKIE, WY 82514

LOCATE WELL AND OUTLINE UNIT ON  
SECTION PLAT — 640 ACRES

STATE

WY

COUNTY

FREMONT

PERMIT NUMBER

WY2000-02141

SURFACE LOCATION DESCRIPTION

1/4 OF SW 1/4 OF NE 1/4 SECTION 5 TOWNSHIP 3N RANGE 1W

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface

Location 1600 ft. from (N/S) N Line of quarter section (see attachment)  
and 1600 ft. from (E/W) E Line of quarter section

WELL ACTIVITY

- ☐ Brine Disposal  
☒ Enhanced Recovery  
☐ Hydrocarbon Storage

TYPE OF PERMIT

☒ Individual☐ Area

Number of Wells \_\_\_\_\_

TRIBAL E 30-T

Lease Name 14-20-0258-06504

Well Number

INJECTION PRESSURE

TOTAL VOLUME INJECTED

TUBING - CASING ANNULUS PRESSURE

(OPTIONAL MONITORING)

MONTH	YEAR	AVERAGE PSIG	MAXIMUM PSIG	BBL	BWIPD	MINIMUM PSIG	MAXIMUM PSIG
Jan	2006	1,341	1,520	78,649	2,537		0
Feb	2006	1,364	1,385	71,422	2,551		0
Mar	2006	1,384	1,410	77,239	2,492		0
Apr	2006	1,284	1,441	101,911	3,397		0
May	2006	1,126	1,441	80,342	2,592		0
Jun	2006	1,135	1,170	61,182	2,039		0
Jul	2006	1,094	1,224	70,281	2,267		0
Aug	2006	1,051	1,212	65,617	2,117		0
Sep	2006	1,052	1,262	63,525	2,117		0
Oct	2006	1,219	1,300	74,787	2,412		0
Nov	2006	1,295	1,331	72,893	2,430		0
Dec	2006	1,281	1,348	73,399	2,368		0

NA=Not Available

## CERTIFICATION

*I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32).*

NAME AND OFFICIAL TITLE (Please type or print)

R.P. Meabon  
Regulatory Coordinator

SIGNATURE

DATE SIGNED

January 24, 2007

**RECEIVED**

**FEB 5 2007**

Office of E.  
**Compliance & F**



2141



**Marathon  
Oil Company**

TAB	GREEN	BLUE	CM
		3	

Rocky Mountain Oil Operations  
Northern U.S. Business Unit

1501 Stampede Avenue  
Cody, WY 82414  
Telephone 307/587-4961

February 7, 2006

US Environmental Protection Agency, Region 8  
999 18<sup>th</sup> Street, Suite 300  
Denver, Colorado 80202  
Attention: Mr. Nathan Wiser  
Mail Code 8ENF-UFO

**RECEIVED**

**FEB 14 2006**

**ECEJ-TEP**

**RE: 2005 Annual Reports  
Steamboat Butte Field  
Circle Ridge Field  
Wind River Indian Reservation**

Dear Mr. Wiser,

Enclosed with this letter are the annual injection reports for Environmental Protection Agency primacy injection wells operated by Marathon Oil Company and water analysis for the above mentioned fields.

Should you have any questions, please contact Mr. Randy Meabon at the above address or phone (307)527-2133.

Sincerely,

MARATHON OIL COMPANY

R.P. Meabon  
Regulatory Coordinator  
Rocky Mountain Operations  
307-527-2133

RPM/rpm  
Annua2003.doc  
Attachments

U2 Entered

Date 3/14/06

Initial RM

CC: CFR, RPM, Steamboat Field File

An Equal Opportunity Employer

**RECEIVED**

FEB 14 2006

**ECEJ-TEP****LABORATORY ANALYTICAL REPORT****Client:** Marathon Oil Co**Project:** Wind River Reservation UIC Program**Lab ID:** C05120538-002**Client Sample ID:** Steamboat Butte (SBB)**Report Date:** 01/09/06**Collection Date:** 12/12/05 12:50**Date Received:** 12/13/05**Matrix:** Aqueous

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
PHYSICAL PROPERTIES							
Conductivity	5230	umhos/cm		1.0		A2510 B	12/14/05 09:57 / jc
Specific Gravity 60/60F	0.998	g/cc		0.005		D1298	12/14/05 13:50 / dd
Solids, Total Dissolved TDS @ 180 C	3670	mg/L		10		A2540 C	12/14/05 15:16 / jc

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.


 UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
 WASHINGTON, DC 20460

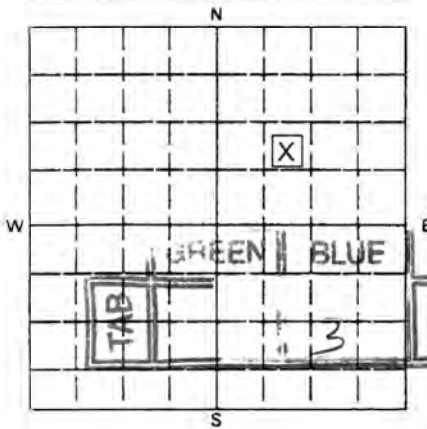
**ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT**
**RECEIVED**  
 FEB 14 2006  
 ECEJ-TEP

NAME AND ADDRESS OF EXISTING PERMITTEE

 MARATHON OIL COMPANY  
 1501 STAMPEDE AVENUE  
 CODY, WYOMING 82414

NAME AND ADDRESS OF SURFACE OWNER

 JOINT BUSINESS COUNCIL  
 P. O. BOX 217  
 FORT WASHAKIE, WY 82514

 LOCATE WELL AND OUTLINE UNIT ON  
 SECTION PLAT — 640 ACRES
STATE  
WYCOUNTY  
FREMONT

PERMIT NUMBER

WY2000-02141

SURFACE LOCATION DESCRIPTION

1/4 OF SW 1/4 OF NE 1/4 SECTION 5 TOWNSHIP 3N RANGE 1W

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface

Location 1600 ft. from (N/S) N Line of quarter section (see attachment)

and 1600 ft. from (E/W) E Line of quarter section

WELL ACTIVITY

- ☐ Brine Disposal  
☒ Enhanced Recovery  
☐ Hydrocarbon Storage

TYPE OF PERMIT

☒ Individual☐ Area

Number of Wells \_\_\_\_\_

TRIBAL E 30-T

Lease Name 14-20-0258-06504

Well Number

INJECTION PRESSURE

TOTAL VOLUME INJECTED

TUBING - CASING ANNULUS PRESSURE

(OPTIONAL MONITORING)

MONTH	YEAR	AVERAGE PSIG	MAXIMUM PSIG	BBL	BWIPD	MINIMUM PSIG	MAXIMUM PSIG
Jan	2005	1,048	980	59,319	1,914		0
Feb	2005	1,150	1,300	68,599	2,450		0
Mar	2005	1,500	1,500	84,972	2,741		0
Apr	2005	1,325	1,500	79,148	2,638		0
May	2005	1,500	1,560	75,445	2,434		0
Jun	2005	1,505	1,520	79,497	2,650		0
Jul	2005	1,534	1,550	83,114	2,681		0
Aug	2005	1,567	1,580	51,796	1,671		0
Sep	2005	1,285	1,400	70,669	2,356		0
Oct	2005	1,388	1,500	85,993	2,774		0
Nov	2005	1,462	1,500	84,330	2,811		0
Dec	2005	1,480	1,600	79,831	2,575		0

NA=Not Available

**CERTIFICATION**

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32).

NAME AND OFFICIAL TITLE (Please type or print)

 R.P. Meabon  
 Regulatory Coordinator

SIGNATURE

DATE SIGNED

January 31, 2006

U2 Entered

Date 3/22/06

Initial JAP

W 2141  
Re Mountain Oil Operations  
Northern U.S. Business Unit



**Marathon  
Oil Company**

1501 Stampede Avenue  
Cody, WY 82414  
Telephone 307/587-4961

**RECEIVED**

**AUG 29 2005**

**ECEJ-TEP**

August 24, 2005

US Environmental Protection Agency – Region VIII  
999 18<sup>th</sup> Street – Suite 300  
Attention: Mr. Ken Phillips, Mail Code 8ENF-UFO  
Denver CO 80202-2466

**Certified  
Return Receipt**

**RE: MIT Corrections For:  
Steamboat Field and Circle Ridge Field  
Wind River Indian Reservation  
Fremont County, Wyoming**

Dear Mr. Phillips,

Per our previous phone conversations, please find the attached corrected Mechanical Integrity Test forms for the above named fields.

The corrections for the tubing pressures meet the requirements set forth in EPA Region 8 Guidance # 39. As previously explained, the annulus pressures were mistakenly used in the place of the tubing pressures on the MIT form and the attached corrected forms identify the tubing pressure at the time of the pressure test.

Should you require more information, please contact R.P. Meabon at the above address or phone (307-527-2133).

MARATHON OIL COMPANY

A handwritten signature in black ink, appearing to read 'R.P. Meabon'.

R.P. Meabon  
Regulatory Coordinator  
Rocky Mountain Operations

cc: RPM  
Jeff Briggs  
"WRF"



# Mechanical Integrity Test

## Casing or Annulus Pressure Mechanical Integrity Test

U.S. Environmental Protection Agency  
Underground Injection Control Program, UIC Direct Implementation Program 8P-W-GW  
999 18th Street, Suite 500 Denver, CO 80202-2466

EPA Witness: \_\_\_\_\_

Date: 7/13/2005

Test conducted by: Dry Creek Oil Field Services - (Chris O'Brien)

Others present: Allan Shaw - Mac Chris O'Brien

Well Name: Tribal 'E' #30 (WY2000 - 02141) Type: (ER) SWD Status: (AC) TA UC  
Field: STEAMBOAT  
Location: SW NE Sec: 5 T: 3N N/S R: 1W E/W County: FREMONT State: WY  
Last MIT: 03 / 23 / 2001 Maximum Allowable Pressure: 1830 PSIG

Is this a regularly scheduled test? ☐ Yes ☐ No

Initial test for permit? ☐ Yes ☐ No

Test after well rework? ☒ Yes ☐ No

Well injection during test? ☒ Yes ☐ No

If Yes, rate: 2564.8 bpd

Pre-test casing/tubing annulus pressure: -0- psig

**CORRECTED  
COPY**

MIT DATA TABLE		TEST #1	TEST #2	TEST #3
TUBING PRESSURE				
Initial Pressure	<u>1534</u> psig	<u>1534</u> psig	<u>1534</u> psig	<u>1534</u> psig
End of test pressure	<u>1534</u> psig			
CASING / TUBING ANNULUS PRESSURE				
0 minutes	<u>1000</u> psig			
5 minutes	<u>1000</u> psig			
10 minutes	<u>1000</u> psig			
15 minutes	<u>1000</u> psig			
20 minutes	<u>1000</u> psig			
25 minutes	<u>1000</u> psig			
30 minutes	<u>1000</u> psig			
minutes				
minutes				
RESULTS	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail

Does the annulus pressure build back up after the test? ☐ Yes ☒ No

# Mechanical Integrity Test

## Casing or Annulus Pressure Mechanical Integrity Test

U.S. Environmental Protection Agency  
Underground Injection Control Program, UIC Direct Implementation Program 8P-W-GW  
999 18<sup>th</sup> Street, Suite 500 Denver, CO 80202-2466

EPA Witness: \_\_\_\_\_ Date: 7 / 13 / 2005  
Test conducted by: Dry Creek Oil Field Services - (Chris O'Brien)  
Others present: Allan Shaw - MOC Chris O'Brien

Well Name: <u>Tribal 'E' #30 (WY2000 - 02141)</u>	Type: <u>ER</u> SWD	Status: <u>AC</u> TA UC
Field: <u>STEAMBOAT</u>		
Location: <u>SW NE</u>	Sec: <u>5</u>	T <u>3N</u> N/S R <u>1W</u> E/W County: <u>FREMONT</u> State: <u>WY</u>
Last MIT: <u>03 / 23 / 2001</u>	Maximum Allowable Pressure: <u>1830</u>	PSIG

Is this a regularly scheduled test? ☐ Yes ☐ No  
Initial test for permit? ☐ Yes ☐ No  
Test after well rework? ☒ Yes ☐ No  
Well injection during test? ☒ Yes ☐ No If Yes, rate: 2564.8 bpd  
Pre-test casing/tubing annulus pressure: -0- psig

MIT DATA TABLE		TEST #1		TEST #2		TEST #3	
TUBING		PRESSURE					
Initial Pressure		<u>1,000</u>	psig		psig		psig
End of test pressure		<u>1,000</u>	psig		psig		psig
CASING / TUBING		ANNULUS		PRESSURE			
<u>09:52 AM</u>	0 minutes	<u>1,000</u>	psig		psig		psig
	5 minutes	<u>1,000</u>	psig		psig		psig
	10 minutes	<u>1,000</u>	psig		psig		psig
	15 minutes	<u>1,000</u>	psig		psig		psig
	20 minutes	<u>1,000</u>	psig		psig		psig
	25 minutes	<u>1,000</u>	psig		psig		psig
<u>10:22 AM</u>	30 minutes	<u>1,000</u>	psig		psig		psig
	minutes		psig		psig		psig
	minutes		psig		psig		psig
RESULTS		<input checked="" type="checkbox"/> Pass	<input type="checkbox"/> Fail	<input type="checkbox"/> Pass	<input type="checkbox"/> Fail	<input type="checkbox"/> Pass	<input type="checkbox"/> Fail

Does the annulus pressure build back up after the test? ☐ Yes ☒ No

## MECHANICAL INTEGRITY PRESSURE TEST

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc. :

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. On the left edge, there is a small metal clip holding the paper down. At the bottom center, there is a small black mark, possibly a staple or a hole punch reinforcement. The paper appears slightly aged or off-white.

**Signature of Witness:** \_\_\_\_\_

**OFFICE USE ONLY – COMPLIANCE FOLLOW-UP**

Staff: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Do you agree with the reported test results?      ☐ YES      ☐ NO

If not, why? \_\_\_\_\_

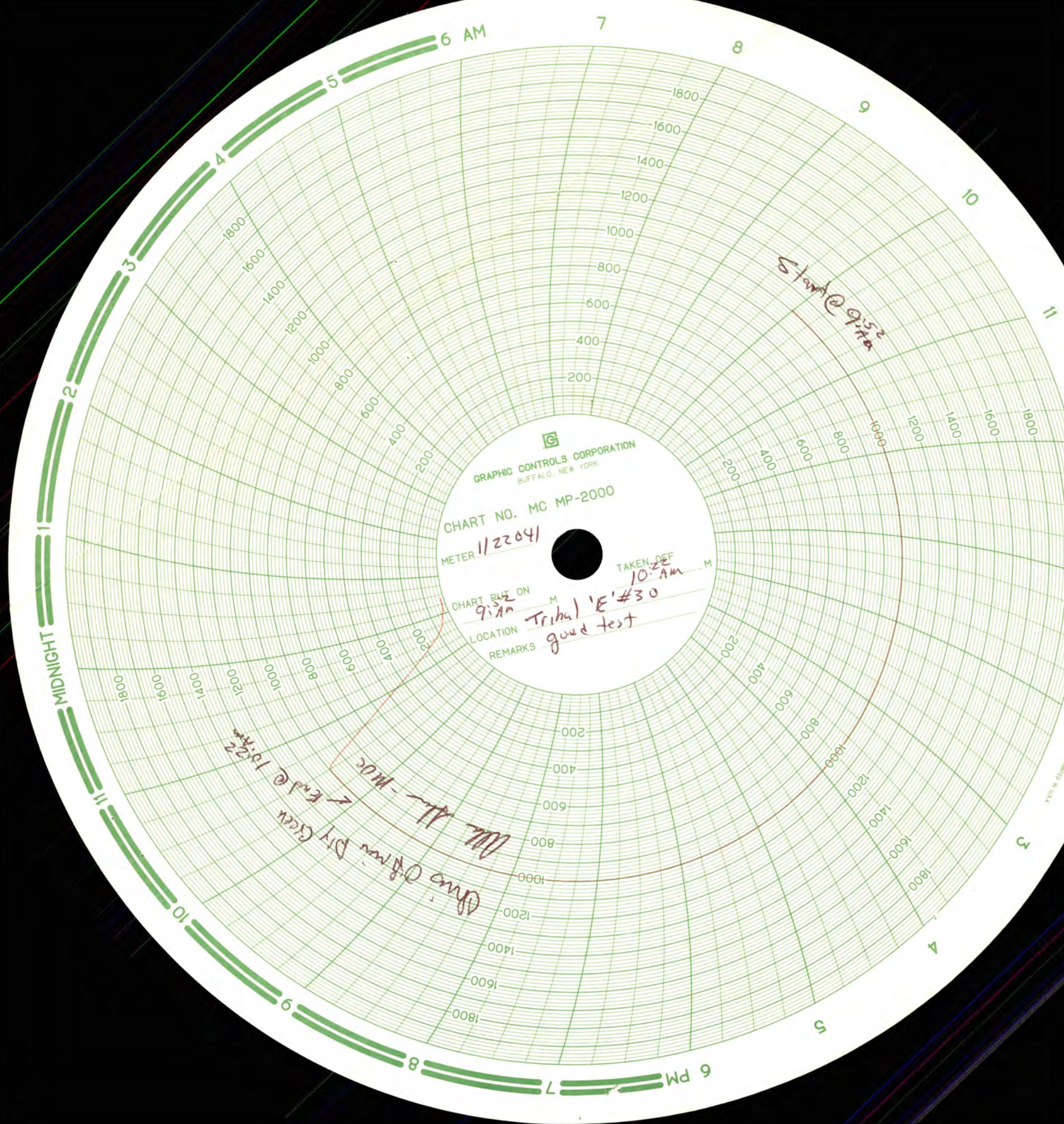
Possible violation identified? ☐ YES ☐ NO

If YES, what: \_\_\_\_\_

IF YES, follow-up initiated? [ ] YES\_\_\_\_\_

[ ] NO - why not? \_\_\_\_\_





GRAPHIC CONTROLS CORPORATION  
BUFFALO, NEW YORK

CHART NO. MC MP-2000

METER 112204

TAKEN OFF  
10:22 AM

CHART PLOT ON  
9:52 AM

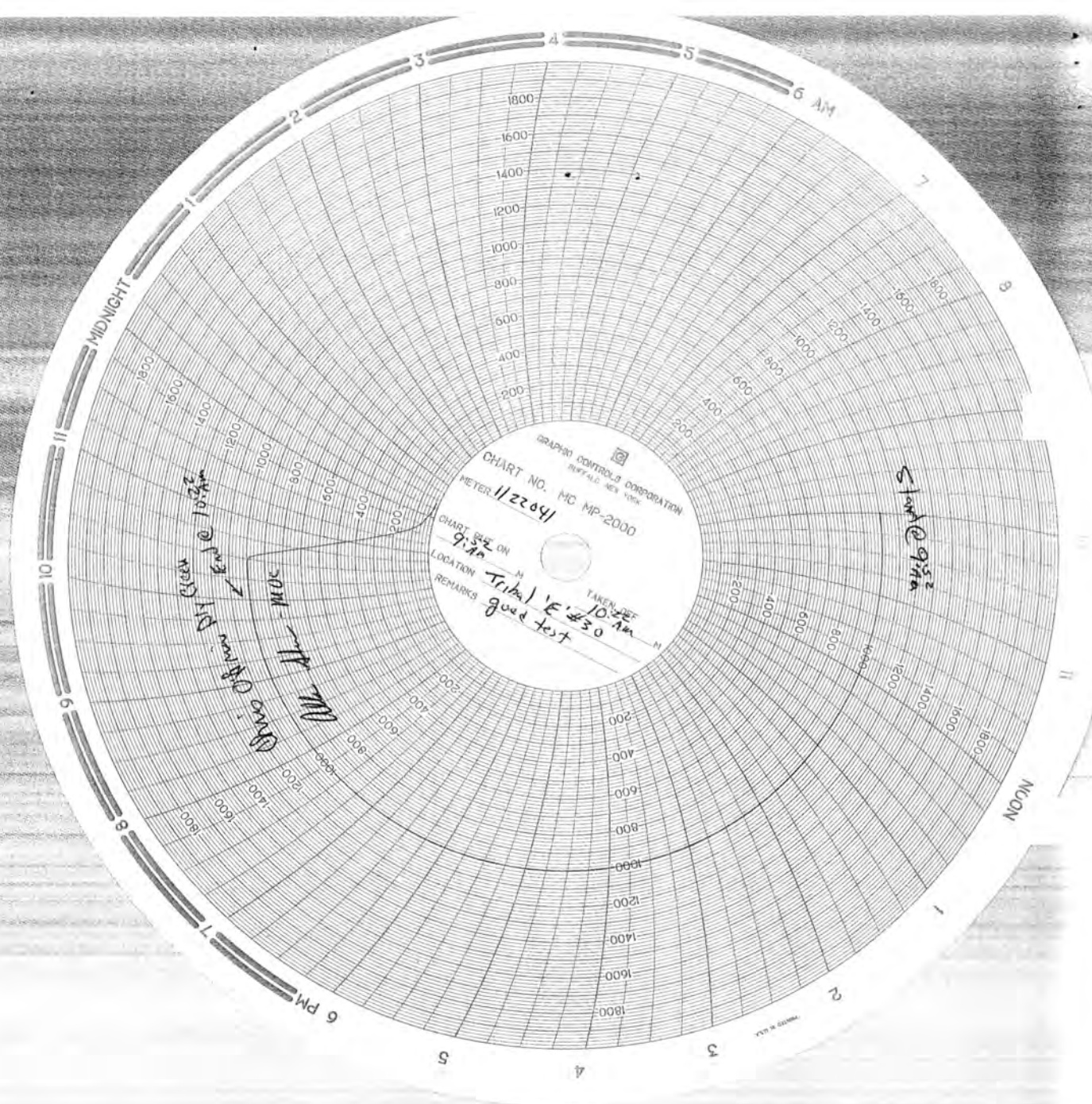
LOCATION

REMARKS

Tribal 'E' #30  
good test

Obs of new Dry Green  
- Mode  
End @ 10:22





Wy 2141

Re Mountain Oil Operations  
No n U.S. Business Unit



**Marathon  
Oil Company**

1501 Stampede Avenue  
Cody, WY 82414  
Telephone 307/587-4961

January 25, 2005

US Environmental Protection Agency, Region 8  
999 18<sup>th</sup> Street, Suite 300  
Denver, Colorado 80202  
Attention: Mr. Nathan Wiser  
Mail Code 8ENF-UFO

**RECEIVED**

**JAN 27 2005**

**ECEJ-TEP**

**RE: 2004 Annual Reports  
Steamboat Butte Field  
Circle Ridge Field  
Wind River Indian Reservation**

Dear Mr. Wiser,

Enclosed with this letter are the annual injection reports for Environmental Protection Agency primacy injection wells operated by Marathon Oil Company and water analysis for the above mentioned fields.

Should you have any questions, please contact Mr. Randy Meabon at the above address or phone (307)527-2133.

Sincerely,

MARATHON OIL COMPANY

A handwritten signature in black ink, appearing to read 'RPM' followed by a stylized flourish.

R.P. Meabon  
Regulatory Coordinator  
Rocky Mountain Operations  
307-527-2133

RPM/rpm  
Annua2003.doc  
Attachments

CC: CFR, RPM, Steamboat Field File

An Equal Opportunity Employer



## Field Check pH Levels for Wind River Injection Samples

### Steamboat Butte Injection Plant

Date: 6/15/04

Time: 10:05 AM

pH meter calibrated with 7.0 buffer solution

by Chad Rich

pH: 6.6

### Circle Ridge Injection Plant

Date: 6/15/04

Time: 1:35 PM

pH meter calibrated with 7.0 buffer solution

by Chad Rich

pH: 6.8



## LABORATORY ANALYTICAL REPORT

**Client:** Marathon Oil Company  
**Project:** Wind River Reservation UIC Program  
**Lab ID:** C04060766-001  
**Client Sample ID:** Steamboat Butte Water Injection Plant

**Report Date:** 07/06/04  
**Collection Date:** 06/15/04 10:05  
**Date Received:** 06/17/04  
**Matrix:** Aqueous

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
PHYSICAL PROPERTIES							
Conductivity	5920	umhos/cm		1.0		A2510 B	06/17/04 11:49 / dd
Solids, Total Dissolved TDS @ 180 C	4230	mg/L		10		A2540 C	06/17/04 15:41 / js
Specific Gravity 60/60F	1.003	g/cc		0.1		Calculation	07/06/04 14:32 / ks
FIELD PARAMETERS							
pH	6.6	s.u.				FIELD	06/15/04 10:05 / ks

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

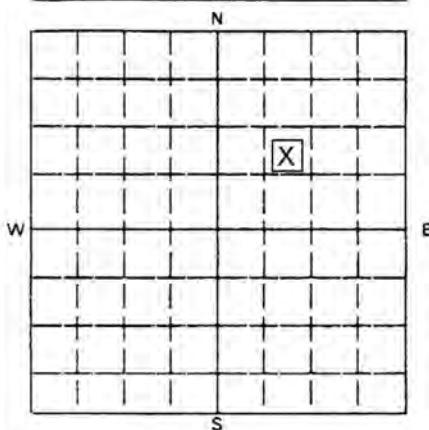
WASHINGTON, DC 20460

## ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT

NAME AND ADDRESS OF EXISTING PERMITTEE

MARATHON OIL COMPANY  
1501 STAMPEDE AVENUE  
CODY, WYOMING 82414

NAME AND ADDRESS OF SURFACE OWNER

JOINT BUSINESS COUNCIL  
P. O. BOX 217  
FORT WASHAKIE, WY 82514LOCATE WELL AND OUTLINE UNIT ON  
SECTION PLAT — 640 ACRES

STATE

WY

COUNTY

FREMONT

PERMIT NUMBER

WY2000-02141

SURFACE LOCATION DESCRIPTION

% OF SW 1/4 OF NE 1/4 SECTION 5 TOWNSHIP 3N RANGE 1W

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface

Location 1600 ft. from (N/S) N Line of quarter section (see attachment)

and 1600 ft. from (E/W) E Line of quarter section

WELL ACTIVITY

☐ Brine Disposal☒ Enhanced Recovery☐ Hydrocarbon Storage

TYPE OF PERMIT

☒ Individual☐ Area

Number of Wells \_\_\_\_\_

TRIBAL E 30-T

Lease Name 14-20-0258-06504

Well Number

INJECTION PRESSURE

TOTAL VOLUME INJECTED

TUBING - CASING ANNULUS PRESSURE

(OPTIONAL MONITORING)

MONTH	YEAR	AVERAGE PSIG	MAXIMUM PSIG	BBL	BWIPD	MINIMUM PSIG	MAXIMUM PSIG
Jan	2004	1,603	1,622	79,541	2,566		0
Feb	2004	1,649	1,700	84,766	2,923		0
Mar	2004	1,610	1,693	79,873	2,577		0
Apr	2004	1,671	1,680	90,744	3,025		0
May	2004	1,693	1,700	91,671	2,957		0
Jun	2004	1,537	1,730	85,398	2,847		0
Jul	2004	1,516	1,691	98,456	3,176		0
Aug	2004	1,660	1,695	95,258	3,073		0
Sep	2004	1,607	1,727	88,619	2,954		0
Oct	2004	1,616	1,633	83,936	2,708		0
Nov	2004	1,682	1,710	84,887	2,830		0
Dec	2004	1,535	1,720	84,117	2,713		0

NA=Not Available

## CERTIFICATION

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32).

NAME AND OFFICIAL TITLE (Please type or print)

R.P. Meabon  
Regulatory Coordinator

SIGNATURE

DATE SIGNED

January 23, 2005

EPA Form 7520-11 (2-84)

U2 Entered

Date 2/15/05

Initial ZAP

U2 Entered

Date 2-2-05

Initial BH

RECEIVED

JAN 27 2005

Office of Enforcement

Department of the Interior

W 2141  
Rocky Mountain Oil Operations  
Northern U.S. Business Unit



1501 Stampede Avenue  
Cody, WY 82414  
Telephone 307/587-4961

February 9, 2004

US Environmental Protection Agency, Region 8  
999 18<sup>th</sup> Street, Suite 300  
Denver, Colorado 80202  
Attention: Mr. Al Craver  
Mail Code 8ENF-T

RECEIVED

FEB 11 2004

Office of Enforcement  
Compliance & Environmental  
Justice

**RE: 2003 Annual Reports**  
**Steamboat Butte Field**  
**Circle Ridge Field**  
**Wind River Indian Reservation**

Dear Mr. Craver,

Enclosed with this letter are the annual injection reports for Environmental Protection Agency primacy injection wells operated by Marathon Oil Company and water analysis for the above mentioned fields.

Should you have any questions, please contact Mr. Randy Meabon at the above address or phone (307)527-2133.

Sincerely,

MARATHON OIL COMPANY

A handwritten signature in dark ink, appearing to read 'R.P. Meabon'.

R.P. Meabon  
Regulatory Coordinator  
Rocky Mountain Operations  
307-527-2133

RPM/rpm  
Annua2003.doc  
Attachments

U2 # 1215

GREEN	BLUE	CBI
	3	



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, DC 20460

## ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT

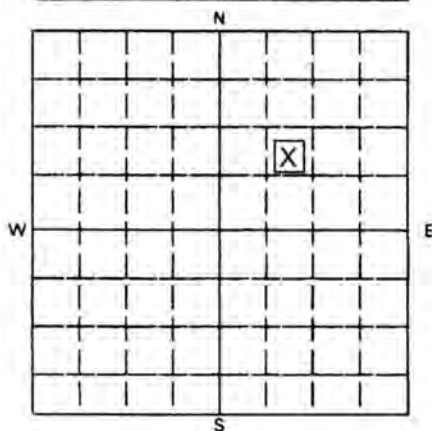
NAME AND ADDRESS OF EXISTING PERMITTEE

MARATHON OIL COMPANY  
1501 STAMPEDE AVENUE  
CODY, WYOMING 82414

NAME AND ADDRESS OF SURFACE OWNER

JOINT BUSINESS COUNCIL  
P. O. BOX 217  
FORT WASHAKIE, WY 82514

LOCATE WELL AND OUTLINE UNIT ON SECTION PLAT — 640 ACRES



STATE

WY

COUNTY

FREMONT

PERMIT NUMBER

WY2000-02141

SURFACE LOCATION DESCRIPTION

1/4 OF SW 1/4 OF NE 1/4 SECTION 5 TOWNSHIP 3N RANGE 1W

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface

Location 1600 ft. from (N/S) N Line of quarter section (see attachment)

and 1600 ft. from (E/W) E Line of quarter section

WELL ACTIVITY

☐ Brine Disposal☒ Enhanced Recovery☐ Hydrocarbon Storage

TYPE OF PERMIT

☒ Individual☐ Area

Number of Wells

Entered

Date

Initial

TRIBAL E 30-T

Lease Name 14-20-0258-06504

Well Number

INJECTION PRESSURE

TOTAL VOLUME INJECTED

TUBING - CASING ANNULUS PRESSURE

(OPTIONAL MONITORING)

MONTH	YEAR	AVERAGE PSIG	MAXIMUM PSIG	BBL	BWIPD	MINIMUM PSIG	MAXIMUM PSIG
Jan	2003	1,431	1,515	77,782	2,509		0
Feb	2003	1,384	1,670	70,605	2,522		0
Mar	2003	1,537	1,680	88,125	2,843		0
Apr	2003	1,564	1,700	104,093	3,470		0
May	2003	1,613	1,630	86,891	2,803		0
Jun	2003	1,534	1,547	74,497	2,483		0
Jul	2003	1,420	1,525	75,362	2,431		0
Aug	2003	1,450	1,520	73,529	2,372		0
Sep	2003	1,448	1,495	70,058	2,335		0
Oct	2003	1,434	1,480	73,418	2,368		0
Nov	2003	1,434	1,479	70,789	2,360		0
Dec	2003	1,425	1,497	73,453	2,369		0

NA=Not Available

## CERTIFICATION

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32).

NAME AND OFFICIAL TITLE (Please type or print)

R.P. Meabon  
Regulatory Coordinator

SIGNATURE

DATE SIGNED

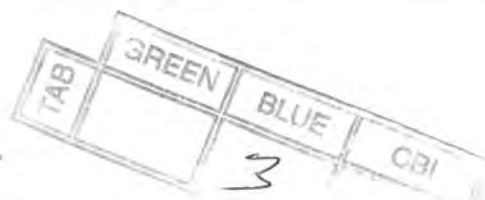
February 4, 2004

U2 Entered

Date

2-20-04

Initial



## Field Check pH Levels for Wind River Injection Samples

### Steamboat Butte Injection Plant

Date: 7/8/03

Time: 9:45 AM

pH meter calibrated with 7.0 buffer solution

by C. A. Rich

pH: 6.5

### Circle Ridge Injection Plant

Date: 7/8/03

Time: 12:25

pH meter calibrated with 7.0 buffer solution

by C. A. Rich

pH: 7.0





## LABORATORY ANALYTICAL REPORT

**Client:** Marathon Oil Co  
**Project:** Wind River Reservation UIC Program  
**Lab ID:** C03070392-001  
**Client Sample ID:** Steamboat Butte Water Inj. Plant

**Report Date:** 07/16/03  
**Collection Date:** 07/08/03 09:45  
**Date Received:** 07/10/03  
**Matrix:** Aqueous

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
PHYSICAL PROPERTIES							
Conductivity	5850	umhos/cm		1.0		A2510 B	07/10/03 16:54 / sml
Solids, Total Dissolved TDS @ 180 C	4100	mg/L		10		A2540 C	07/10/03 15:21 / sml
Specific Gravity 60/60F	1.0	g/cc		0.1		Calculation	07/15/03 13:51 / ck

41 -  
1.0

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.

TRACKING NO. PAGE NO.

070392R0001

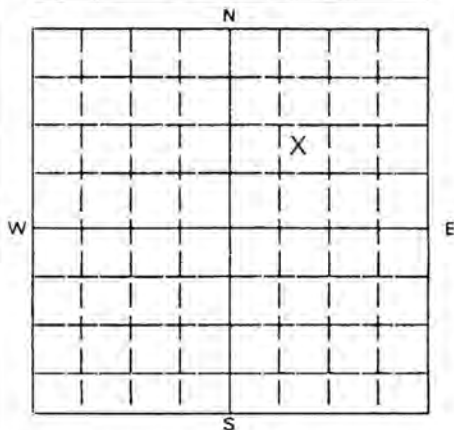
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

## ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT

NAME AND ADDRESS OF EXISTING PERMITTEE

MARATHON OIL COMPANY  
1501 STAMPEDE AVENUE  
CODY, WYOMING 82414

NAME AND ADDRESS OF SURFACE OWNER

JOINT BUSINESS COUNCIL  
P. O. BOX 217  
FORT WASHAKIE, WY 82514LOCATE WELL AND OUTLINE UNIT ON  
SECTION PLAT — 640 ACRES

STATE

WY

COUNTY

FREMONT

PERMIT NUMBER

WY2000-02141

SURFACE LOCATION DESCRIPTION

1/4 OF SW 1/4 OF NE 1/4 SECTION 5 TOWNSHIP 3N RANGE 1W

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface

Location 1600 ft. from (N/S) N Line of quarter section (see attachment)

and 1600 ft. from (E/W) E Line of quarter section

WELL ACTIVITY

- ☐ Brine Disposal  
☒ Enhanced Recovery  
☐ Hydrocarbon Storage

TYPE OF PERMIT

- ☒ Individual  
☐ Area

Number of Wells \_\_\_\_\_

TRIBAL E 30-T

Lease Name 14-20-0258-06504

Well Number

INJECTION PRESSURE

TOTAL VOLUME INJECTED

TUBING - CASING ANNULUS PRESSURE

(OPTIONAL MONITORING)

MONTH	YEAR	AVERAGE PSIG	MAXIMUM PSIG	BBL	BWIPD	MINIMUM PSIG	MAXIMUM PSIG
Jan	2002	1,372	1,560	86,574	2,793		0
Feb	2002	1,437	1,487	76,878	2,746		0
Mar	2002	1,553	1,600	89,395	2,884		0
Apr	2002	1,473	1,650	91,761	3,059		0
May	2002	1,604	1,686	88,328	2,849		0
Jun	2002	1,352	1,600	86,836	2,895		40
Jul	2002	1,421	1,510	90,128	2,907		29
Aug	2002	1,349	1,377	83,198	2,684		0
Sep	2002	1,500	1,571	80,633	2,688		19
Oct	2002	1,537	1,635	84,844	2,737		20
Nov	2002	1,514	1,519	82,832	2,761		0
Dec	2002	1,506	1,515	81,248	2,621		0

NA=Not Available

## CERTIFICATION

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32).

NAME AND OFFICIAL TITLE (Please type or print)

R.P. Meabon  
Regulatory Coordinator

SIGNATURE

DATE SIGNED

January 17, 2003

RECEIVED

JAN 23 2003

Office of Enforcement  
Compliance & Environmental  
Justice



**Marathon  
Oil Company**

1501 Stampede Avenue  
Cody, WY 82414  
Telephone 307/587-4961

January 17, 2003

US Environmental Protection Agency, Region 8  
999 18<sup>th</sup> Street, Suite 300  
Denver, Colorado 80202  
Attention: Mr. Al Craver  
Mail Code 8ENF-T

**RE: 2002 Annual Reports  
Steamboat Butte Field  
Circle Ridge Field  
Wind River Indian Reservation**

Dear Mr. Craver,

Enclosed with this letter are the annual injection reports for Environmental Protection Agency primacy injection wells operated by Marathon Oil Company and water analysis for the above mentioned fields.

Should you have any questions, please contact Mr. Randy Meabon at the above address or phone (307)527-2145.

Sincerely,

MARATHON OIL COMPANY

A handwritten signature in black ink, appearing to read 'RPM' or 'R.P. Meabon'.

R.P. Meabon  
Regulatory Coordinator  
Rocky Mountain Operations  
307-527-2145

RPM/rpm  
Annua2001.doc  
Attachments

CC: CFR, RPM, Steamboat Field File

**RECEIVED**

JAN 23 2003

Office of Enforcement  
Compliance & Environmental  
Justice



### LABORATORY ANALYTICAL REPORT

Client: Marathon Oil Company  
Project: Wind River Reservation UIC Program

Lab Order: C02090175  
Report Date: 09/13/02

Lab ID: C02090175-001  
Client Sample ID: Steamboat Butte Water Inj Plant  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
<b>PHYSICAL PROPERTIES</b>							
Conductivity	5720	umhos/cm		1.0		A2510 B	09/06/02 19:02 / lam
Solids, Total Dissolved TDS @ 180 C	3460	mg/L		10		A2540 C	09/09/02 13:53 / sml
Specific Gravity 60/60F	1.00	g/cc		0.100		Calculation	09/13/02 09:35 / vh

Lab ID: C02090175-002  
Client Sample ID: Circle Ridge Water Inj Plant  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
<b>PHYSICAL PROPERTIES</b>							
Conductivity	1170	umhos/cm		1.0		A2510 B	09/06/02 18:56 / lam
Solids, Total Dissolved TDS @ 180 C	644	mg/L		10		A2540 C	09/09/02 13:53 / sml
Specific Gravity 60/60F	1.00	g/cc		0.100		Calculation	09/13/02 09:35 / vh

Steam  
TDS 3460  
SG 1.00

Circle R  
TDS 644  
SG 1.00

RECEIVED  
JAN 23 2003  
Office of Enforcement  
Compliance & Environmental  
Justice

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.

TRACKING NO. PAGE NO.  
90175R00001





Date: 13-Sep-02

CLIENT: Marathon Oil Company  
Project: Wind River Reservation UIC Program  
Sample Delivery Group: C02090175

## CASE NARRATIVE

THIS IS THE FINAL PAGE OF THE LABORATORY ANALYTICAL REPORT

### BRANCH LABORATORY LOCATIONS

eli-b - Energy Laboratories, Inc. - Billings, MT  
eli-g - Energy Laboratories, Inc. - Gillette, WY  
eli-h - Energy Laboratories, Inc. - Helena, MT  
eli-r - Energy Laboratories, Inc. - Rapid City, SD

### SUBCONTRACTING ANALYSIS

Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.

### SAMPLE TEMPERATURE COMPLIANCE: 4°C (±2°C)

Temperature of samples received may not be considered properly preserved by accepted standards. Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

ENERGY LABORATORIES, INC. - CASPER, WY certifies that certain method selections contained in this report meet requirements as set forth by NELAC. Some client specific reporting requirements may not require NELAC reporting protocol.

ELI appreciates the opportunity to provide you with this analytical service. For additional information and services visit our web page [www.energylab.com](http://www.energylab.com).

The total number of pages of this report are indicated by the last four digits of the tracking number located in the lower right corner.

RECEIVED

JAN 23 2003

Office of Enforcement  
Compliance & Environmental  
Justice

TRACKING NO. PAGE NO.

90175R00006



## ANALYTICAL SUMMARY REPORT

September 13, 2002

Marvin Blakesley  
Marathon Oil Company  
1501 Stampede Ave  
Cody, WY 82414

Workorder No.: C02090175

Project Name: Wind River Reservation UIC Program

Energy Laboratories Inc. received the following 2 samples from Marathon Oil Company on 9/6/2002 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C02090175-001	Steamboat Butte Water Inj Plant	09/04/02 10:25	09/06/02	Aqueous	Conductivity Specific Gravity Solids, Total Dissolved
C02090175-002	Circle Ridge Water Inj Plant	09/04/02 15:05	09/06/02	Aqueous	Same As Above

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative or Report.

If you have any questions regarding these tests results, please call

Report Approved By:

RECEIVED

JAN 23 2003

Office of Enforcement  
Compliance & Environmental  
Justice

TRACKING NO. PAGE NO.

90175R00005

Energy Laboratories Inc.

Sample Receipt Checklist

Client Name: MRTHN-OL-CMPNY

Date and Time Received: 9/6/2002 09:15:00

Work Order Number C02090175

Received by: ks

Checklist completed by

*[Signature]*

9/6/02

Signature

Date

Reviewed by

Initials

Date

Carrier name: FedEx

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☒

No ☐

Not Present ☐

Custody seals intact on sample bottles?

Yes ☐

No ☐

Not Present ☒

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Container/Temp Blank temperature in compliance?

Yes ☒

No ☐

3 °C

Water - VOA vials have zero headspace?

Yes ☐

No ☐

No VOA vials submitted ☒

Water - pH acceptable upon receipt?

Yes ☒

No ☐

Not Applicable ☐

Adjusted?

Checked by

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted:

Date contacted:

Person contacted:

Contacted by:

Regarding:

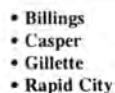
Comments:

Corrective Action

RECEIVED  
JAN 23 2003  
Office of Enforcement  
Compliance & Environmental  
Justice

TRACKING NO. PAGE NO.

90175R00004



Mail Only: PO Box 3258 • Casper, WY • 82602-3258  
UPS/FedEx Deliveries: 2393 Salt Creek Highway • Casper, WY • 82601

toll free 1-888-235-0515  
voice 307-235-0515  
fax 307-234-1639

**For Sample Tracking Purposes, Please Provide Contact Name and Telephone #'s as Indicated** *(SEE BACK OF FORM FOR EXAMPLES AND INSTRUCTIONS)*

[illegible]

NG NO. 1 PAGE NO. 1	1. Sampler: (signature)	Date	Time	Received by: (signature)	2. Relinquished by: (signature)	Date	Time	Received by: (signature)
	<i>[Signature]</i>	9/4/02	3:55 PM	<i>[Signature]</i>	<i>[Signature]</i>	9/5/02	12:30	<i>[Signature]</i>
	3. Relinquished by: (signature)	Date	Time	Received by: (signature)	4. Relinquished by: (signature)	Date	Time	Received at Laboratory by: (signature)
	<i>[Signature]</i>					9/6/02	09:15	<i>[Signature]</i>

Co2090175

3.

90175R00003





## QA/QC Summary Report

**Client:** Marathon Oil Company  
**Project:** Wind River Reservation UIC Program

**Report Date:** 09/13/02  
**Work Order:** C02090175

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A2510 B</b>							Batch: 020906B-COND-PROBE-W		
<b>Sample ID: C02090175-001ADUP</b> Conductivity	Sample Duplicate 5690	umhos/cm	1.00				0.5	10	09/06/02 19:02
<b>Sample ID: C02090194-006BDUP</b> Conductivity	Sample Duplicate 4230	umhos/cm	1.00				0.2	10	09/06/02 19:08
<b>Sample ID: C02090194-016BDUP</b> Conductivity	Sample Duplicate 5230	umhos/cm	1.00				0.2	10	09/06/02 19:16
<b>Sample ID: C02090194-026BDUP</b> Conductivity	Sample Duplicate 2310	umhos/cm	1.00				0.4	10	09/06/02 19:18
<b>Method: A2540 C</b>							Batch: 020909A-SLDS-TDS-W		
<b>Sample ID: C02090232-001AMS</b> Solids, Total Dissolved TDS @ 180 C	Matrix Spike 4820	mg/L	10.0	104	90	110			09/09/02 15:19
<b>Sample ID: C02090232-001AMSD</b> Solids, Total Dissolved TDS @ 180 C	Matrix Spike Duplicate 4820	mg/L	10.0	104	90	110	0	10	09/09/02 15:19

RECEIVED

JAN 23 2003

Office of Enforcement  
Compliance & Environmental  
Justice

**Qualifiers:** ND - Not Detected at the Reporting Limit  
R - RPD outside of recommended recovery limits

S - Spike Recovery outside of recommended recovery limits

**TRACKING NO. PAGE NO.**  
**90175R00002**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

# ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT

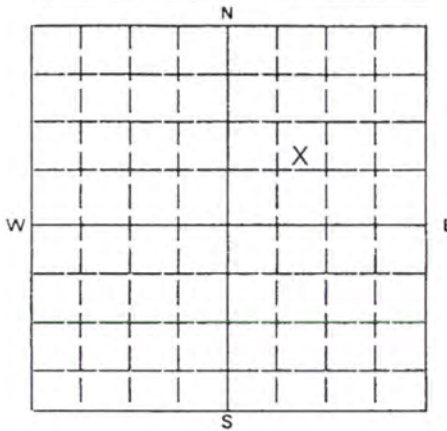
NAME AND ADDRESS OF EXISTING PERMITTEE

MARATHON OIL COMPANY  
1501 STAMPEDE AVENUE  
CODY, WYOMING 82414

NAME AND ADDRESS OF SURFACE OWNER

JOINT BUSINESS COUNCIL  
P. O. BOX 217  
FORT WASHAKIE, WY 82514

LOCATE WELL AND OUTLINE UNIT ON  
SECTION PLAT — 640 ACRES



STATE

WY

COUNTY

FREMONT

PERMIT NUMBER

WY2000-02141

SURFACE LOCATION DESCRIPTION

1/4 OF SW 1/4 OF NE 1/4 SECTION 5 TOWNSHIP 3N RANGE 1W

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface

Location 1600 ft. from (N/S) N Line of quarter section (see attachment)

and 1600 ft. from (E/W) E Line of quarter section

WELL ACTIVITY

TYPE OF PERMIT

☐ Brine Disposal

☐ Individual

☒ Enhanced Recovery

☐ Area

☐ Hydrocarbon Storage

Number of Wells \_\_\_\_\_

TRIBAL E 30-T

Lease Name 14-20-0258-06504

Well Number

INJECTION PRESSURE

TOTAL VOLUME INJECTED

TUBING - CASING ANNULUS PRESSURE  
(OPTIONAL MONITORING)

MONTH	YEAR	AVERAGE PSIG	MAXIMUM PSIG	BBL	BWIPD	MINIMUM PSIG	MAXIMUM PSIG
Jan	2001	1,480	1,507	19,484	628		10
Feb	2001	1,487	1,495	18,648	666		37
Mar	2001	1,500	1,500	8,754	796		40
Apr	2001	1,098	1,167	46,525	1,550		22
May	2001	1,239	1,560	48,841	1,575		0
Jun	2001	1,427	1,600	90,002	3,000		0
Jul	2001	1,563	1,620	105,723	3,432		0
Aug	2001	1,642	1,660	49,161	1,585		0
Sep	2001	1,445	1,445	27,778	925		30
Oct	2001	1,512	1,540	100,951	3,277		33
Nov	2001	1,543	1,590	86,781	2,893		23
Dec	2001	1,430	1,530	84,669	2,731		0

NA=Not Available

## CERTIFICATION

*I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32).*

NAME AND OFFICIAL TITLE (Please type or print)

R.P. Meabon  
Regulatory Coordinator

SIGNATURE

DATE SIGNED

February 11, 2002

REVIEWED

BY:

DATE:

2-25-02



- Billings
- Casper
- Gillette
- Rapid City

# ENERGY LABORATORIES, INC.'S CHAIN OF CUSTODY RECORD

Mail Only: PO Box 3258 • Casper, WY • 82602-3258  
 UPS/FedEx Deliveries: 2393 Salt Creek Highway • Casper, WY • 82601

toll free 1-888-235-0515\*  
 voice 307-235-0515  
 fax 307-234-1639

For Sample Tracking Purposes, Please Provide Contact Name and Telephone #'s as Indicated (SEE BACK OF FORM FOR EXAMPLES AND INSTRUCTIONS)

Project Name / Location / Purchase Order # / Bid #				Number of containers Sample Type: A W S V U O Air Water Soils/solids Vegetation Urine Other	Type of Analyses Requested				Special Requests
Name / Phone # / Fax #					TDS	SM 2540-C	Specific Conductivity	SM 2510-B	Specific Gravity
Wind River Reservation UIC Program									
MARATHON OIL CO.									
Date	Time	composite	grab sample						
Send Invoice to: Marathon Oil Company % Marvin Blakesley 1501 Stampede Ave. Cody WY 82414 Send Report to: Marathon Oil Company % Marvin Blakesley 1501 Stampede Ave. Cody WY 82414 Sample I.D.									Comments, Special Instructions, etc.
11/24/01	9:20am	X	STEAMBOAT Butte	1-W	X	X	X		Run TDS ASAP 7day holding time
11/24/01	10:55am	X	SEB Water Inj. Plant Circle Ridge	1-W	X	X	X		

REV. 11/25/00  
 BY: [Signature]  
 DATE: 11/25/01

1. Sampler: (signature) [Signature]	Date 11/24/01	Time 4:00pm	Received by: (signature) [Signature]	2. Relinquished by: (signature) [Signature]	Date 11/27/01	Time 9:30am	Received by: (signature) UPS
3. Relinquished by: (signature) UPS	Date	Time	Received by: (signature)	4. Relinquished by: (signature)	Date 11/27/01	Time 1000	Received at Laboratory by: (signature) [Signature]

11770R000003  
 TRACKING ID  
 PAGE NO.



<b>ENERGY LABORATORIES, INC.'S CHAIN OF CUSTODY RECORD</b> Mail Only: PO Box 3258 • Casper, WY • 82602-3258 UPS/FedEx Deliveries: 2393 Salt Creek Highway • Casper, WY • 82602										voice 307-235-0515 fax 307-234-1639	
For Sample Tracking Purposes, Please Provide Contact Name and Telephone #'S As Indicated (SEE BACK OF FORM FOR EXAMPLES AND INSTRUCTIONS)											
Project Name / Location / Purchase Order # Thunderbasin Town of Hope No PO #					Number of containers Sample Type: A W S V U O Air Water Soils/Solids Vegetation Urine Other	Type of Analyses Requested					Special Requests  <b>Please fax results as soon as possible Thank you.</b>
Name / Phone # / Fax # Jeff Jones @ (307) 555-1515, (307) 555-5555 fax						Asbestos - TEM	10C's - RADs	NO <sub>2</sub> , NO <sub>3</sub> , F	VOCs - 502.2	SOCs - 504, 505, 508	
Date	Time	composite	grab sample	Send Invoice to: Jeff Jones PO Box Nowhere Hope, WY 80000  Send Report to: Bob Brown PO Box Somewhere USA, WY 81111 Sample I.D.							
1995											
5/28	11:35		X	Entry to Distribution	4	X		X			Phase II SDWA Primary
5/28	11:45		X	Distribution Tap	9		X	X		X	"

1. Sampler: (signature) Jeff Jones	Date 5-28-95	Time 12:05p	Received by: (signature) Harry Truckers	2. Relinquished by: (signature) Harry Truckers	Date 5-28-95	Time 13:15p	Received by: (signature) Sheryl A. Garling
3. Relinquished by: (signature) N/A	Date N/A	Time N/A	Received by: (signature) N/A	4. Relinquished by: (signature) Sheryl A. Garling	Date 5-28-95	Time 14:00p	Received at Laboratory by: Roger A. Garling

**Instructions:**

- (1) A completed Chain-of-Custody must be submitted with all samples
- (2) Special Requests area can include (but not limited to) the following:
  - Turnaround status, Rush status, Due Date, etc.
  - Special mailing instructions:
    - send copy of Report and/or Invoice to a second party
    - send copy of Report to a Government Agencies (EPA, etc.)
  - Public Water System (PWS) Number
  - Do you want samples returned to you or disposed of?





### LABORATORY ANALYSIS REPORT

Client: Marathon Oil Company

Project: Wind River Reservation UIC Program

Contact: Marvin Blakesley

Sample Matrix: Liquid, Water

Date/Time Received: 11/28/2001 10:00

Report Date: December 3, 2001

Laboratory ID	Sample Date / Time	Sample ID	Conductivity, $\mu\text{mho/cm}$	Specific Gravity	Total Dissolved Solids, mg/L
C01110770-001	11/26/2001 09:20	Steamboat Butte SBB Water Inj. Plant	4750	1.002	3400.0
C01110770-002	11/26/2001 10:50	Circle Ridge CR Water Inj. Plant	1180	1.000	662

REVIEWED

BY: 

DATE: 2-25-02

QUALITY ASSURANCE DATA			
Method	SM 2510-B	Calculation	SM 2540-C
Reporting Limit	1.0	0.1	10
RPD <sup>1</sup>	0.2	-	0.0
Spike <sup>2</sup>	-	-	105
Analyst	ldr	msh	ldr
Date / Time Analyzed	11/29/2001 13:19	12/03/2001 11:38	11/29/2001 14:53

#### NOTES:

- (1) These values are an assessment of analytical precision. The acceptance range is 0-20% for sample results above 10 times the reporting limit. This range is not applicable to samples with results below 10 times the reporting limit.
- (2) These values are an assessment of analytical accuracy. They are a percent recovery of the spike addition. ELI performs a matrix spike on 10 percent of all samples for each analytical method.

msh: r:\reports\clients2001\marathon\_oil\liquid\10770-1-2.xls

TRACKING NO. PAGE NO.

11770R00002

Energy Laboratories Inc.

Sample Receipt Checklist

Client Name MRTHN-OL-CMPNY

Date and Time Receive

11/28/2001 10:00:00

Work Order Number C01110770

Received by smc

Checklist completed by

*Hani Schroeder*  
Signature

*11/28/01*  
Date

Reviewed by

Initials

Date

Carrier name UPS

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☒

No ☐

Not Present ☐

Custody seals intact on sample bottles?

Yes ☐

No ☐

Not Present ☒

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Container/Temp Blank temperature in compliance?

Yes ☒

No ☐

-2 °C

Water - VOA vials have zero headspace?

Yes ☐

No ☐

No VOA vials submitted ☒

Water - pH acceptable upon receipt?

Yes ☒

No ☐

Not Applicable ☐

Adjusted?

*No*

Checked by

*SMC*

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted

Date contacted:

Person contacted

Contacted by:

Regarding

Comments:

Corrective Action

REVIEWED

BY:

DATE:

*2-25-02*

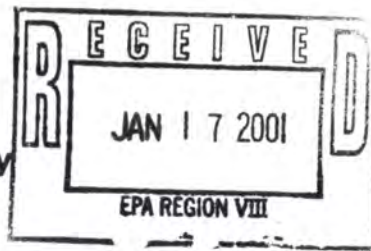
TRACKING NO. PAGE NO.

11770R00004

Rocky Mountain Region



**Marathon  
Oil Company**



1501 Stampede Avenue  
Cody, WY 82414  
Telephone 307/587-4961

January 12, 2001

Mr. Dan Jackson  
US Environmental Protection Agency  
UIC Implementation Section  
999 18<sup>th</sup> Street, Suite 500  
Denver, CO 80202-2466

**VIA Fax #  
303-312-7084**

**Certified Mail**  
Return Receipt Requested

RE: Tribal E-30 EPA # WY2000-02141  
Tribal C-30X EPA # WY2000-02143  
Steamboat Butte Field  
Fremont, County, Wyoming

*C-30X  
perf 7004-7202  
add 6924-7210  
F 30  
6991-7148  
6908-6991*

Dear Mr. Jackson,

This letter is to advise of Marathon Oil Company plans to stimulate and extend the Tensleep completion in both the above wells. This work was discussed in a phone conversation with Chuck Williams on the 10<sup>th</sup> of January. Additional perforations for injection are necessary to increase the recovery of reserves from offset Tensleep producing wells.

The Tribal C-30X well(EPA # WY2000-02143) is under the Rule Authorized well(Grand-fathered injector). Additional perforation intervals into the Tensleep formation at Tribal C-30X was approved by the EPA on February 28, 1997. We now plan to commence such work and injection. Enclosed is a copy of the EPA approval copy. The other well, Tribal E-30(EPA #WY2000-02141) is also a Rule Authorized well(Grand-fathered injector) Marathon will perforate the Tensleep at E-30 from 6908' to 6991' and at C-30X from 6924' to 7210'. Sand frac's on both wells will follow.

At your earliest convenience, please approve the additional perforations for the Tribal E-30 well. Following the workover operations each well will have a mechanical integrity test prior to resuming injection. Also a Well Rework Record form and Mechanical Integrity Test form will be submitted to you within (30) days of completion of the workovers.

Thank-you for your prompt attention to this matter. Should you require additional information, please contact me the above letter head address or phone (307)527-2150.

Sincerely,

MARATHON OIL COMPANY

Carl R. Roberts

Assoc. Engr.

RMO Oil Team

Attachments

CRR:dlc (3156-12)





1501 Stampede Avenue  
Cody, WY 82414-4721  
Telephone 307/587-4961

RECEIVED

MAR 29 2001

March 27, 2000

**CERTIFIED MAIL**  
**Return Receipt Requested**

US Environmental Protection Agency, Region 8  
Attention: Mr. Al Craver  
Mail Code 8ENF-T  
999 18<sup>th</sup> Street – Suite 300  
Denver, CO 80202-2466

RE: Tribal E-30 EPA # WY2000-02141  
SW NE Sec.5, T3N, R1W  
Steamboat Butte Field  
Wind River Indian Reservation  
Fremont County, Wyoming

**Well Rework Record, MIT, and Request Permission to Inject**

Dear Mr. Craver,

Attached please find the original MIT for the above well, Tribal E-30, performed okay to 1000 psig for 35 minutes and witnessed by Mr. Richard Burnette, Tribal member of the Shoshone Oil and Gas Commission. Additionally attached is the Well Rework Record and a well bore diagram.

Marathon Oil Company requests permission to commence injection into the Tribal E-30 well as all of the requirements from the final permit have been completed. Please respond to the above address if there are any questions.

Sincerely,

MARATHON OIL COMPANY

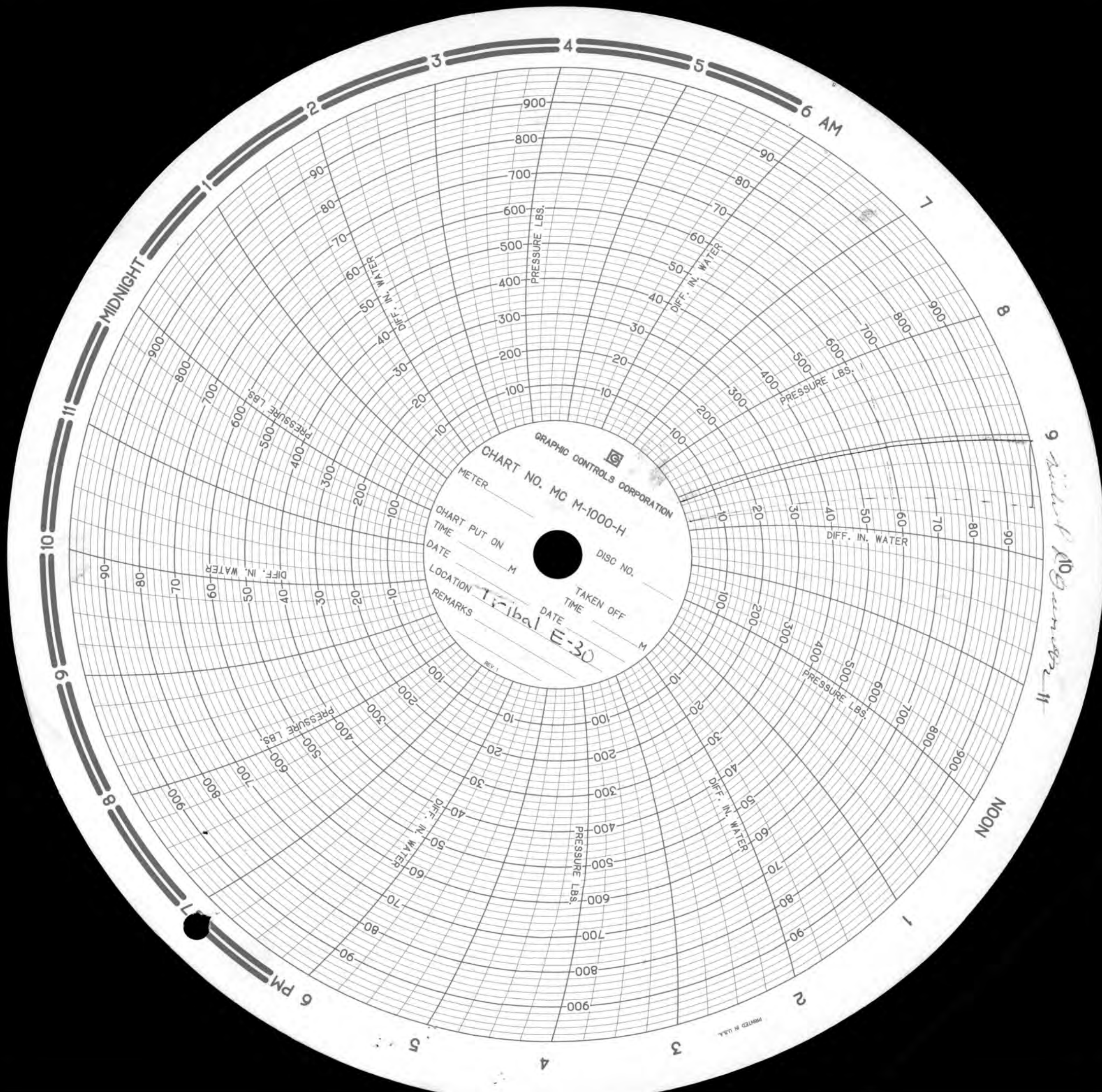
A handwritten signature in dark ink, appearing to read 'Carl R. Roberts', with a long horizontal flourish extending to the right.

Carl R. Roberts  
Assoc. Engineer

CRR/crr  
E-30mitInject.doc  
Attachments

cc: D.J. Haman  
J.F. Salomonsen-Steamboat Butte Field Office  
"WRF"





# Mechanical Integrity Test

## Casing or Annulus Pressure Mechanical Integrity Test

U.S. Environmental Protection Agency  
Underground Injection Control Program, UIC Direct Implementation Program 8P-W-GW  
999 18<sup>th</sup> Street, Suite 500 Denver, CO 80202-2466

EPA Witness: Richard Burnette - Soc Date: 3/23/01  
Test conducted by: R & C Trucks - Steve Simondi  
Others present: Greg Hilton - Mac

Well Name: <u>Tribal E-30</u>	Type: ER SWD	Status: AC TA UC
Field: <u>Steamboat Butte</u>		
Location: _____	Sec: <u>5</u> T <u>3</u> N/S R <u>4</u> E/W	County: <u>Fremont</u> State: <u>WY</u>
Operator: <u>Marathon Oil Company</u>		
Last MIT: <u>12/8/99</u>	Maximum Allowable Pressure: <u>1830</u>	PSIG

Is this a regularly scheduled test? ☒ Yes [ ] No

Initial test for permit? [ ] Yes ☒ No

Test after well rework? ☒ Yes [ ] No

Well injecting during test? [ ] Yes ☒ No If Yes, rate: \_\_\_\_\_ bpd

Pre-test casing/tubing annulus pressure: 0/0 psig

MIT DATA TABLE		Test #1	Test #2	Test #3
<b>TUBING PRESSURE</b>				
Initial Pressure	psig		psig	psig
End of test pressure	psig		psig	psig
<b>CASING/TUBING ANNULUS PRESSURE</b>				
0 minutes	<u>1000</u> psig		psig	psig
5 minutes	<u>995</u> psig		psig	psig
10 minutes	<u>990</u> psig		psig	psig
15 minutes	<u>985</u> psig		psig	psig
20 minutes	<u>980</u> psig		psig	psig
25 minutes	<u>980</u> psig		psig	psig
30 minutes	<u>980</u> psig		psig	psig
minutes	psig		psig	psig
minutes	psig		psig	psig
RESULT	<input checked="" type="checkbox"/> Pass [ ] Fail	[ ] Pass [ ] Fail	[ ] Pass [ ] Fail	[ ] Pass [ ] Fail

Does the annulus pressure build back up after the test? [ ] Yes ☒ No

## MECHANICAL INTEGRITY PRESSURE TEST

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

Signature of Witness:

## OFFICE USE ONLY - COMPLIANCE FOLLOWUP

Staff \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Do you agree with the reported test results?     ☐ YES     ☐ NO

If not, why?

Possible violation identified? ☐ YES ☐ NO

If YES, what

If YES - followup initiated? ☐ YES

[ ] NO - why not?

☐ Data Entry

☐ Compliance Staff

[ ] 2<sup>nd</sup> Data Entry

☐ Hardcopy Filing



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, DC 20460



## WELL REWORK RECORD

NAME AND ADDRESS OF PERMITTEE Marathon Oil Company 1501 Stampede Avenue Cody, Wyoming 82414		NAME AND ADDRESS OF CONTRACTOR R&S Well Service P. O. Box 1148 Thermopolis, WY 82443	
LOCATE WELL AND OUTLINE UNIT ON SECTION PLAT — 640 ACRES  	STATE WY	COUNTY Fremont	PERMIT NUMBER WY2000-02141
	SURFACE LOCATION DESCRIPTION $\frac{1}{4}$ OF SW $\frac{1}{4}$ OF NE $\frac{1}{4}$ SECTION 5 TOWNSHIP 3N RANGE 1W		
	LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT Surface Location 1600 ft. from (N/S) N Line of quarter section and 1600 ft. from (E/W) E Line of quarter section		
	WELL ACTIVITY <input type="checkbox"/> Brine Disposal <input checked="" type="checkbox"/> Enhanced Recovery <input type="checkbox"/> Hydrocarbon Storage  Lease Name  Tribal E	Total Depth Before Rework 7296'  Total Depth After Rework 7296'  Date Rework Commenced 3/7/2001  Date Rework Completed 3/23/2001	TYPE OF PERMIT <input checked="" type="checkbox"/> Individual <input type="checkbox"/> Area Number of Wells _____ Rule Authorized Well Number  30

## WELL CASING RECORD -- BEFORE REWORK

Casing		Cement		Perforations		Acid or Fracture Treatment Record
Size	Depth	Sacks	Type	From	To	
9 5/8"	1024'	300	H			
5 1/2"	7296'	1290	H			
				6991'	7016'	
				7036'	7052'	
				7110'	7120'	
				7138'	7148'	

## WELL CASING RECORD -- AFTER REWORK (Indicate Additions and Changes Only)

Casing		Cement		Perforations		Acid or Fracture Treatment Record
Size	Depth	Sacks	Type	From	To	
5 1/2"	7296'	1290	H	6862'	6872'	16,026 gals with 20# Delta Frac, SLF, 39,827# sand
				6910'	6930'	

 DESCRIBE REWORK OPERATIONS IN DETAIL  
 USE ADDITIONAL SHEETS IF NECESSARY

Please see attached sheet

WIRE LINE LOGS, LIST EACH TYPE

Log Types

Logged Intervals

## CERTIFICATION

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

NAME AND OFFICIAL TITLE (Please type or print) Carl R. Roberts Assoc. Engineer	SIGNATURE 	DATE SIGNED 3/27/01
--	---------------	------------------------



Rework Operations Attachment  
Tribal E-30

Pulled injection equipment. Perforated the extended Tensleep zone, from 6862'-6872', 6910'-6930'. Isolated the Tensleep perms with BP and pkr. Sand frac'd the Tensleep zone, 6862'-6930' with 39,827# 20/40 Ottawa sand and 16,026 gal fluid. An MIT was conducted successfully to 1000 psi for 35 minutes on 3/23/01, witnessed by Shoshine Oil and Gas Commission Tribal member, Mr Richard Burnette.



## Tribal E-30

(Existing)

### General Well Information:

API Code: 49-013-21402  
Reservoir: Tensleep  
Field: Steamboat Butte  
Field Code: 3231 OP - 16838  
Permit No.: WY2000-02141  
Spud: January 29, 1984  
Finished Drilling: March 3, 1984  
Completion: March 28, 1984  
First Prod/Inj: June 29, 1984  
Abandon:

### Well Location:

1600' FNL, 1600' FEL, Sec 5, T3N-R1W

### Elevations:

KB: 5690' Csg Flange  
Grd: 5678' Tbg Head  
KB-Grd: 12'

Last MIT: March 23, 2001

Max Inj P: 1860 psig

Max Inj Q:

### Formation Tops:

2847'	Frontier	
3574'	Mowry	
4113'	Muddy	
4158'	Thermop.	
4327'	Dakota	
4405'	Fuson	
4693'	Morrison	
4769'	Sundance	
5050'	Gyp Springs	
5266'	Nugget	
5394'	Chugwater	
5552'	Curtis	
5646'	Crow Mountain	
5677'	Alcova	
5832'	Red Peak	
6538'	Dinwoody	PBTD 7208'
6624'	Phosphoria	TD 7296'
6908'	Tensleep	

Tree: 2-9/16, 5K

9-5/8" 40# K-55 LT&C @ 1024' w/ 300 sx (TOC - Surface)  
12-1/4" hole

10 jts 2-7/8" 6.5# C-75 8rd Tubing (non-coated)  
218 jts 2-7/8" Tubing (IPC)

Baker F Nipple (2.25" ID)

6800' Baker Model R3 Double Grip Packer

### Perfs (Tensleep)

6910'-6930' (2spf-3/9/01)  
6862'-6872' (2spf-3/9/01)  
6991-7016' (4 spf - 3/27/91)  
7036-7052' (4 spf - 3/27/91)  
7110-7120' (4 spf - 3/27/91)  
7138-7148' (4 spf - 3/27/91)

Fill @ 6966' (1/30/2001)

5-1/2" 17# L-80 @ 7296' w/ 1290 sx (TOC - 4794' CBL)  
8-1/2" hole

### Well History:

9/84 - Pumped polymer to modify injection profile.  
6/84 - Put on injection at 3619 bwipd at 1150 psig.  
3/84 - Completed as Tensleep water injector. Perforated and acidized (6000 gals 15% HCl) Tensleep.  
1/91 - Tubing failure. Replace 1 jt. Acidize tbg w/ 800 gals 15% HCl. Acid did not dissolve scale. Replace tbg.  
12/99 - Replaced 1 jt of corroded tubing. Perform MIT. Note: lots of scale in tubing.  
1/01 - Tagged fill at 6966' (above perfs).  
3/9/01 Perforated the Tensleep with 2spf. 6862'-72', 6910'-30'  
3/7/01 Sand frac'd Tensleep 6862'-6930' w/39,827# 20/40 Ottawa sand and 16,026 gal fluid(Delta Frac)

Well Name & Number:	Tribal E-30	Lease:	Tribal E-30		
County or Parish:	Fremont	State/Prov.	Wyoming	Country:	USA
Current Status:	Active Tensleep Injector				
Prepared By:	M. Olson	Last Revision Date:	3/26/2001		

26-MAR-2001  
07:33:45 AM

MOC MORNING REPORT  
ACTIVITY REPORT FOR TRIBAL E 30  
FROM 25-FEB-2001 TO 25-MAR-2001

Page: 2  
REGION: RMR

FIELD: STEAMBOAT BUTTE

OPR PROP: STEAMBOAT BUTTE

INTENT: SAND FRAC INJECTOR

07-MAR-2001 SI this well today in preparation for upcoming workover. Approval was given to shut injection down from the EPA via phone call on March 5th. Well went on a vacuum and has no wellhead pressure. A 400 bbl swab tank, 400 bbl frac tank, rig pump, flat tank, and tubing racks has been moved in by HCC.

SI DATE	MIRU DATE	SHUT-IN/RIG DATA RIG NAME	RIG#
07-MAR-2001			

DAILY COST  
INTENT: SAND FRAC INJECTOR

DESCRIPTION	DAILY COSTS	PREVIOUS CUM DLY COST	CURRENT CUM DLY COST
DRILLING	0	0	0
COMPLETION W/O RM	500	0	500
SURFACE	0	0	0
TOTALS	500	0	500

08-MAR-2001 HCC moved 230 joints of 3-1/2" slimhole N-80 workstring on to location. MIRU R&S Well Service Rig #10. Rig had welder perform rig maintenance, and drill line was replaced before work was started. ND wellhead and NU BOP's, changed out rams to 2-7/8". Released packer, and started coming out of the hole laying down 2-7/8" J-55 internally coated tubing. LD 80 joints and SDFD.

SI DATE	MIRU DATE	SHUT-IN/RIG DATA RIG NAME	RIG#
07-MAR-2001	08-MAR-2001	R&S WELL SERVICE	10

DAILY COST  
INTENT: SAND FRAC INJECTOR

DESCRIPTION	DAILY COSTS	PREVIOUS CUM DLY COST	CURRENT CUM DLY COST
DRILLING	0	0	0
COMPLETION W/O RM	1700	500	2200
SURFACE	0	0	0
TOTALS	1700	500	2200

09-MAR-2001 HCC moved 25 joints of 2-7/8" J-55 tubing onto location. LD the rest of the 2-7/8" J-55 internally coated tubing. Top 10 joints of the 2-7/8" string was uncoated and the seating nipple was uncoated. A scale buildup was occurring on the inside of the uncoated joints and seating nipple. An acid test indicated that the scale buildup was purely iron sulfide. NU BOP's and change out rams to 3-1/2". PU and RIH with a notched collar, jet sub, 2 check valves, 24 joints of 2-7/8" J-55 tubing, tubing pump, 2 check valves, 6' pup joint, 1 joint of 2-7/8" J-55, and a 4' perforated sub. Crossover to 3-1/2" and PU 100 joints of 3-1/2" N-80 workstring. SDFD.

SI DATE	MIRU DATE	SHUT-IN/RIG DATA RIG NAME	RIG#
07-MAR-2001	08-MAR-2001	R&S WELL SERVICE	10

26-MAR-2001  
07:33:46 AM

10C MORNING REPORT  
ACTIVITY REPORT FOR TRIBAL E 30  
FROM 25-FEB-2001 TO 25-MAR-2001

Page: 3  
REGION: RMR

FIELD: STEAMBOAT BUTTE

OPR PROP: STEAMBOAT BUTTE

DAILY COST

INTENT: SAND FRAC INJECTOR

DESCRIPTION	DAILY COSTS	PREVIOUS CUM DLY COST	CURRENT CUM DLY COST
DRILLING	0	0	0
COMPLETION W/O RM	1700	2200	3900
SURFACE	0	0	0
TOTALS	1700	2200	3900

12-MAR-2001 Continue PU 3-1/2" N-80 workstring and RIH with sand pump assembly. Tagged up at 6973' KB. Drilled on hard fill and baled 4' of fill. Dropped through bridge and tagged up again at 7040' KB. Drilled hard hill and baled 7' of fill down to 7047' KB. Clutch began slipping on the rig, could no longer operate sand pump. POOH and stand back all 3-1/2" workstring. LD sand pump assembly. Tail joints had scale in them, acid test indicated iron sulfide. SWIFN.

SHUT-IN/RIG DATA

SI DATE	MIRU DATE	RIG NAME	RIG#
07-MAR-2001	08-MAR-2001	R&S WELL SERVICE	10

DAILY COST

INTENT: SAND FRAC INJECTOR

DESCRIPTION	DAILY COSTS	PREVIOUS CUM DLY COST	CURRENT CUM DLY COST
DRILLING	0	0	0
COMPLETION W/O RM	2000	3900	5900
SURFACE	0	0	0
TOTALS	2000	3900	5900

13-MAR-2001 MIRU Halliburton Wireline. NU lubricator. PU and RIH on wireline with 10' of 4" port guns loaded at 2 spf and 120 degree phasing with big hole charges. Correlated to cement bond log to get on depth, and perforated the Upper Tensleep from 6862' to 6872' KB. POOH with guns, all shots fired. PU and RIH on wireline with 20' of 4" port guns loaded at 2 spf and 120 degree phasing with big hole charges. Correlated to cement bond log to get on depth, and perforated the Upper Tensleep from 6910' to 6930' KB. POOH with guns, all shots fired. Saw no change in pressure at the surface after both perforating runs, well was dead. ND lubricator and RDMO Halliburton Wireline Services. PU 4-3/4" bit and 5-1/2" HES scraper and RIH on 3-1/2" tubing. RIH with one joint and SDFD. Cannot trip pipe due to excessive winds.

SHUT-IN/RIG DATA

SI DATE	MIRU DATE	RIG NAME	RIG#
07-MAR-2001	08-MAR-2001	R&S WELL SERVICE	10

DAILY COST

INTENT: SAND FRAC INJECTOR

DESCRIPTION	DAILY COSTS	PREVIOUS CUM DLY COST	CURRENT CUM DLY COST
DRILLING	0	0	0
COMPLETION W/O RM	4700	5900	10600
SURFACE	0	0	0
TOTALS	4700	5900	10600



26-MAR-2001  
07:33:46 AM

C MORNING REPORT  
ACTIVITY REPORT FOR TRIBAL E 30  
FROM 25-FEB-2001 TO 25-MAR-2001

Page: 4  
REGION: RMR

FIELD: STEAMBOAT BUTTE

OPR PROP: STEAMBOAT BUTTE

PERF DATA

VENDOR: HALLIBURTON GUN SIZE: 4" CHG SIZE(GM): 22.7  
CHG TYPE: BIGHOLE CORRELATION LOG USED: CBL-CCL

FORM: TENSLEEP SUB: UPPER TOP DEP: 6862  
BOT DEP: 6872 DEN SPF: 2 PHASE DEG: 120 TOT SHOTS: 20  
STIM GUN: SLEEVE LENGTH(ft): 0.0'  
OTHER DEPTHS:  
FORM: TENSLEEP SUB: UPPER TOP DEP: 6910  
BOT DEP: 6930 DEN SPF: 2 PHASE DEG: 120 TOT SHOTS: 40  
STIM GUN: SLEEVE LENGTH(ft): 0.0'  
OTHER DEPTHS:

14-MAR-2001 PU and RIH with 4-3/4" bit and 5-1/2" scraper on 5 joints of 2-7/8" tubing and the rest 3-1/2" N-80 workstring. RIH to 7001' KB and started scraping hard. Started circulating to clean out fill, filled hole and caught circulation with 62 bbls. Circulated one joint down real easy, then started drilling on scale while circulating down. Broke through several scale rings and continued to circulate downhole, lost no water to the formation. Started drilling harder scale at 7115' KB, still able to circulate downhole while drilling on scale. Broke through hard scale at 7150 and circulated downhole easily to PBDT of 7208' KB. Circulated clean, SD pumps, and POOH to 6900'. SWIFN. Nalco chemical hand performed several acid tests on the returns, all samples indicated a strong presence of Calcium Carbonate and Iron Sulfide.

SHUT-IN/RIG DATA

SI DATE	MIRU DATE	RIG NAME	RIG#
07-MAR-2001	08-MAR-2001	R&S WELL SERVICE	10

DAILY COST

INTENT: SAND FRAC INJECTOR

DESCRIPTION	DAILY COSTS	PREVIOUS CUM DLY COST	CURRENT CUM DLY COST
DRILLING	0	0	0
COMPLETION W/O RM	3000	10600	13600
SURFACE	0	0	0
TOTALS	3000	10600	13600

15-MAR-2001 TIH W/CSG scraper back through perforation. TOOHP w/3-1/2"TBG and CSG scraper. LD CSG scraper. PU model N Quik BP TIH set at 60'pull TBG out and pressure test blind rams to 2000 PSI.PU 3-1/2" TBG pup w/ collar on bottom pull up against pipe rams and pressure test to 1000 PSI held. TIH Release RBP TOOHP LD RBP. PU and RIH with 5-1/2" HES RBP, retrieving head, 6' pup, HES RTTS packer, 2-1/4" seating nipple, 2-7/8" N-80 6' pup, crossover, and 3-1/2" N-80 tubing. Set RBP at 6978', PU to 6945' and set packer. Pressure test RBP and pressure did not hold. RIH and released RBP, PU to 6968' and set RBP. PU to 6945' and set packer. Pressure tested RBP to 1600# and pressure held. PUH to 6791' and set packer packer. Pressure tested casing to 500# and pressure held. SWIFN.

SHUT-IN/RIG DATA

SI DATE	MIRU DATE	RIG NAME	RIG#
07-MAR-2001	08-MAR-2001	R&S WELL SERVICE	10

DAILY COST

INTENT: SAND FRAC INJECTOR

DESCRIPTION	DAILY COSTS	PREVIOUS CUM DLY COST	CURRENT CUM DLY COST
DRILLING	0	0	0
COMPLETION W/O RM	2400	13600	16000

26-MAR-2001  
07:33:46 AM

C MORNING REPORT  
ACTIVITY REPORT FOR TRIBAL E 30  
FROM 25-FEB-2001 TO 25-MAR-2001

Page: 5  
REGION: RMR

FIELD: STEAMBOAT BUTTE

OPR PROP: STEAMBOAT BUTTE

SURFACE	0	0	0
TOTALS	2400	13600	16000

19-MAR-2001 Filled tubing and dropped standing valve. When standing valve seated, filled tubing to surface. MIRU Halliburton. Pressure tested tubing to 6100# and surface lines to 7000#. Fished standing valve, and set the pop-off on the backside to 850#. Started pumping frac, pressure broke at 2.9 bpm at 2200#. Pumped frac away at approximately 20 bpm and 2500-3500#. Started losing pressure in the 7 ppg stage like the frac was expanding to the lower Tensleep. Increased rate to try and avoid screen out, maintained pressure. Flushed to 1 bbl above the top perf. RDMO Halliburton. Released packer and POOH with 3-1/2" slimhole workstring. RIH with retrieving head on 3-1/2" workstring and prepare to circulate sand off the RBP and retrieve. SWIFN.

SHUT-IN/RIG DATA

SI DATE	MIRU DATE	RIG NAME	RIG#
07-MAR-2001	08-MAR-2001	R&S WELL SERVICE	10

DAILY COST

INTENT: SAND FRAC INJECTOR

DESCRIPTION	DAILY COSTS	PREVIOUS CUM DLY COST	CURRENT CUM DLY COST
DRILLING	0	0	0
COMPLETION W/O RM	34000	16000	50000
SURFACE	0	0	0
TOTALS	34000	16000	50000

FRAC DATA

FORMATION	SUB	TOP	PERF	BOT	PERF	VENDOR	
TENSLEEP	TOP	6862	6940			HALLIBURTON	

PPG	RATE	FRAC LIQUID	PRESS (PSI)	VOLUME (GAL)	PROP SZ	PROP TYPE	LBS	PRO
PAD PPG	5.8	Delta Frac	2187	1259				
1.0 PPG	16.4	Delta Frac	3815	560	20/40	Ottowa		173
PPG	19.8	Delta Frac	3477	4004				
1.0 PPG	20.6	Delta Frac	3115	813	20/40	Ottowa		172
2.0 PPG	20.7	Delta Frac	3105	1011	20/40	Ottowa		1795
3.0 PPG	20.9	Delta Frac	3019	1506	20/40	Ottowa		5849
4.0 PPG	21.0	Delta Frac	3016	2012	20/40	Ottowa		8815
6.0 PPG	21.4	Delta Frac	2585	1512	20/40	Ottowa		11385
7.0 PPG	23.1	Delta Frac	2479	865	20/40	Ottowa		11638
PPG								
PPG								
PPG								
PPG								
PPG								
PPG								
DISPL PPG	22.0	Delta Frac	3005	2484				
TOTALS PPG				16026				39827

ISIP 1333 , 5 MIN SIP 800 , 10 MIN SIP 370 , 15 MIN SIP 66

20-MAR-2001 Tagged sand at 6862'. Circulated sand out to RBP and latched on to RBP. Released RBP and RIH to 7160' cleanly, did not tag fill. POOH with RBP while LD 3-1/2" slimhole workstring. LD RBP and SWIFN.

SHUT-IN/RIG DATA

SI DATE	MIRU DATE	RIG NAME	RIG#
07-MAR-2001	08-MAR-2001	R&S WELL SERVICE	10

26-MAR-2001  
07:33:46 AM

C MORNING REPORT  
ACTIVITY REPORT FOR TRIBAL E 30  
FROM 25-FEB-2001 TO 25-MAR-2001

Page: 6  
REGION: RMR

FIELD: STEAMBOAT BUTTE

OPR PROP: STEAMBOAT BUTTE

DAILY COST

INTENT: SAND FRAC INJECTOR

DESCRIPTION	DAILY COSTS	PREVIOUS CUM DLY COST	CURRENT CUM DLY COST
DRILLING	0	0	0
COMPLETION W/O RM	2400	50000	52400
SURFACE	0	0	0
TOTALS	2400	50000	52400

21-MAR-2001 ND BOP's. PU 5-1/2" injection packer and RIH while PU 2-7/8" internally coated tubing. RIH to 2500' and packer set when it hit fluid. Had a hard time releasing and decided to come out of the hole to check for damage to the rubbers. Packer looked fine except for some junk in the bottom of it. Cleaned up packer and ran back in hole to 6794'. Pumped 110 bbls of water down the backside with 5 gallons of packer fluid. Set packer at 6794' and RU pump to test backside. Tested backside to 1000# and pressure held. SDFD. Al Craver with the EPA and Richard Burnette with the Shoshone O&G Commission were contacted and informed of an upcoming MIT on this well on Friday, March 23rd. Both parties consented.

SHUT-IN/RIG DATA

SI DATE	MIRU DATE	RIG NAME	RIG#
07-MAR-2001	08-MAR-2001	R&S WELL SERVICE	10

DAILY COST

INTENT: SAND FRAC INJECTOR

DESCRIPTION	DAILY COSTS	PREVIOUS CUM DLY COST	CURRENT CUM DLY COST
DRILLING	0	0	0
COMPLETION W/O RM	2400	52400	54800
SURFACE	0	0	0
TOTALS	2400	52400	54800

22-MAR-2001 RDMO R&S Well Service Rig #10. The swab tank, frac tanks, pipe racks, rig pump, and flat tank have all been moved to Tribal E-26.

SHUT-IN/RIG DATA

SI DATE	MIRU DATE	RIG NAME	RIG#
07-MAR-2001	08-MAR-2001	R&S WELL SERVICE	10

DAILY COST

INTENT: SAND FRAC INJECTOR

DESCRIPTION	DAILY COSTS	PREVIOUS CUM DLY COST	CURRENT CUM DLY COST
DRILLING	0	0	0
COMPLETION W/O RM	1000	54800	55800
SURFACE	0	0	0
TOTALS	1000	54800	55800

23-MAR-2001 Performed MIT using R&C Trucks, pressure tested the casing to 1000# and the pressure bled to 980# in 35 minutes. Richard Burnette with Shoshone Oil & Gas Commission witnessed the proceedings, and approved the test.

SHUT-IN/RIG DATA

SI DATE	MIRU DATE	RIG NAME	RIG#
07-MAR-2001			





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, DC 20460

## ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT

NAME AND ADDRESS OF EXISTING PERMITTEE MARATHON OIL COMPANY 1501 STAMPEDE AVENUE CODY, WYOMING 82414	NAME AND ADDRESS OF SURFACE OWNER JOINT BUSINESS COUNCIL P. O. BOX 217 FORT WASHAKIE, WY 82514
---	---

LOCATE WELL AND OUTLINE UNIT ON SECTION PLAT — 640 ACRES  	STATE WY	COUNTY FREMONT	PERMIT NUMBER WY2000-02141
	SURFACE LOCATION DESCRIPTION ¼ OF SW ¼ OF NE ¼ SECTION 5 TOWNSHIP 3N RANGE 1W		
	LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT Surface Location 1600 ft. from (N/S) <u>NE</u> line of quarter section (see attachment) and 1600 ft. from (E/W) <u>E</u> line of quarter section		
	WELL ACTIVITY <input type="checkbox"/> Brine Disposal <input checked="" type="checkbox"/> Enhanced Recovery <input type="checkbox"/> Hydrocarbon Storage TYPE OF PERMIT <u>30-T</u> DATE: <u>02/23/01</u> TRIBAL E 30-T Lease Name 14-20-0258-06504 Well Number		

		INJECTION PRESSURE		TOTAL VOLUME INJECTED		TUBING - CASING ANNULUS PRESSURE (OPTIONAL MONITORING)	
MONTH	YEAR	AVERAGE PSIG	MAXIMUM PSIG	BBL	BWIPD	MINIMUM PSIG	MAXIMUM PSIG
Jan	2000	1,692	1,700	26,988	870.58		NA
Feb	2000	1,638	1,680	21,053	760.03		0
Mar	2000	1,692	1,750	30,490	983.55		0
Apr	2000	1,528	1,750	22,048	734.93		0
May	2000	1,542	1,578	21,295	686.94		0
Jun	2000	1,564	1,575	22,617	753.90		15
Jul	2000	1,549	1,585	33,347	1,075.71		20
Aug	2000	1,574	1,719	30,718	990.90		12
Sep	2000	1,578	1,638	17,375	585.01		57
Oct	2000	1,581	1,605	39,403	1,271.06		50
Nov	2000	1,426	1,560	31,520	1,050.66		35
Dec	2000	1,511	1,514	31,207	1,006.67		30

NA=Not Available

## CERTIFICATION

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32).

NAME AND OFFICIAL TITLE (Please type or print) W. L. Browne Operations Manager	SIGNATURE 	DATE SIGNED February 8, 2001
--	---------------	---------------------------------

RECEIVED

FEB 14 2001





J. L. Bowzer  
Production Manager  
Rocky Mountain Region

1501 Stampede Avenue  
Cody, WY 82414  
Telephone 307/587-4961

FEB 14 2000

Received  
Office of Enforcement

FEB 14 2000

Compliance & Env. Justice

February 9, 2000

David Hogle  
Director Groundwater Program  
U. S. Environmental Protection Agency  
Region VIII, Mail Code 8P2-W-GW  
999 - 18<sup>th</sup> Street, Suite 500  
Denver, CO 80202-2466

**Certified Mail**  
**Return Receipt Requested**  
**Z 301 626 051**

Connally Mears  
Director - Technical Enforcement Program - UIC  
U. S. Environmental Protection Agency  
Region VIII, Mail Code 8ENF-T  
999 - 18<sup>th</sup> Street, Suite 500  
Denver, CO 80202-2466

**Certified Mail**  
**Return Receipt Requested**  
**Z 301 626 052**

Re: Signatory Authorization - Applications, Permits, Permit Reports  
and Information to the US Environmental Protection Agency

Gentlemen:

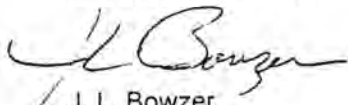
I, J. L. Bowzer, succeeding Mr. Tim Tipton as Marathon Oil Company's Rocky Mountain Region Manager, authorize Mr. W. D. Holmes, Operations Manager, to sign applications for permits, permit reports and other such information to be submitted to the U. S. Environmental Protection Agency under its applicable statutes and regulations.

Enclosed is a copy of a certification from Marathon's Assistant Secretary which confirms that Region Operations Managers have authority to execute permits, notices, reports or any other documents relating to Marathon Oil Company's exploration and production operations.

I further authorize Mr. R. P. Meabon and Mr. C. R. Adams to sign reports and other routine correspondence and forms, including requests for well work, well rework forms, plugging and abandonment notices, and other information requested by the Director.

Sincerely,

MARATHON OIL COMPANY

  
J. L. Bowzer  
Production Manager  
Rocky Mountain Region

JLB:dlc

Attachment

C E R T I F I C A T I O N

I, J. A. Evans, Assistant Secretary of Marathon Oil Company, an Ohio corporation, hereby certify that the following is a true and correct copy of a resolution unanimously adopted at a meeting of the Executive Committee of the Board of Directors of Marathon Oil Company, held in the City of Midland, Texas on the 10th day of October, 1994, at 12:40 p.m., at which meeting all members of the Committee were present:

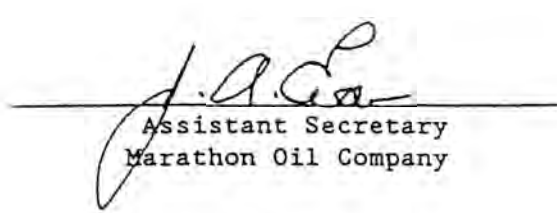
- "WHEREAS: On July 12, 1982, in conformance with the U.S. Environmental Protection Agency regulations then in effect, this Company authorized the President to designate employees authorized to sign environmental permit applications and related documents on behalf of the Company; and
- "WHEREAS: On June 22, 1987 this Company authorized the President and any Vice President to enter into transactions pertaining to the business of the Company and to execute and deliver any and all written instruments in connection with any such transaction, including but not limited to permits, reports or other documents related thereto and further authorized the President and any Vice President to delegate the authorities granted thereby to other employees of the Company; and
- "WHEREAS: Environmental Protection Agency regulations now allow the delegation of authority to execute such documents to qualified corporate managers;
- "NOW, THEREFORE, BE IT RESOLVED: That the Region Production Managers, the Refining Division Managers, the Marathon Brand Division Manager and the Manager, Logistics & Terminals of this Company are hereby authorized:

- (1) To execute on behalf of the Company
    - (a) permit applications; and
    - (b) reports required by permits, responses to requests for information issued by any permit issuing authority and permit applications for Class II wells under the Underground Injection Control Program;
- all as required or permitted under the Clean Air Act, Clean Water Act, Safe Drinking Water Act, Resource Conservation and Recovery Act, Comprehensive Environmental Response, Compensation and Liability Act, Toxic Substances Control Act or corresponding state acts or any implementing regulations and any amendments to such acts or regulations; and

- (2) Where allowed by law, to delegate, in writing, the authority granted under (1)(a) or (b) above to any employee of the Company having responsibility for the overall operation of the regulated facility or activity, or any employee of the Company having responsibility for environmental programs at that regulated facility or activity; and

"FURTHER RESOLVED: That the resolution of similar nature adopted on December 20, 1990 is hereby superseded."

IN WITNESS WHEREOF, I have hereunto affixed my signature and the seal of the Company this 20th day of April, 1995.

  
Assistant Secretary  
Marathon Oil Company


 ED STATES ENVIRONMENTAL PROTECTION.  
 WASHINGTON, DC 20460

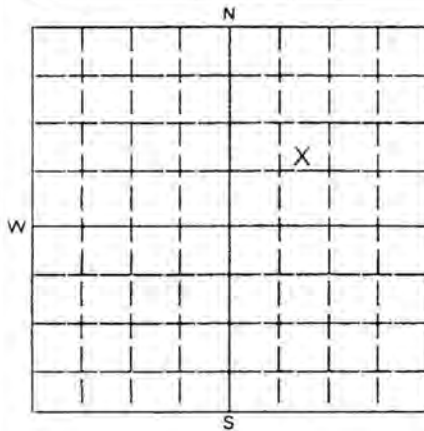
**ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT**

NAME AND ADDRESS OF EXISTING PERMITTEE

 MARATHON OIL COMPANY  
 1501 STAMPEDE AVENUE  
 CODY, WYOMING 82414

NAME AND ADDRESS OF SURFACE OWNER

 JOINT BUSINESS COUNCIL  
 P. O. BOX 217  
 FORT WASHAKIE, WY 82514

 LOCATE WELL AND OUTLINE UNIT ON  
 SECTION PLAT — 640 ACRES


STATE

WY

COUNTY

FREMONT

PERMIT NUMBER

WY2000-02141

SURFACE LOCATION DESCRIPTION

1/4 OF SW 1/4 OF NE 1/4 SECTION 5 TOWNSHIP 3N RANGE 1W

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface

Location 1600 ft. from (N/S) N Line of quarter section (see attachment)

and 1600 ft. from (E/W) E Line of quarter section

 Received  
 Office of Enforcement

WELL ACTIVITY

- ☐ Brine Disposal  
☒ Enhanced Recovery  
☐ Hydrocarbon Storage

TYPE OF PERMIT

- ☐ Individual  
☐ Area  
 Number of Wells

Lease Name 14-20-0258-06504

Well Number

FEB 11 2000

TRIBAL E #30

TENSLEEP

BY: BajDATE: 2-16-00

INJECTION PRESSURE

TOTAL VOLUME INJECTED

 TUBING - CASING ANNULUS PRESSURE  
 (OPTIONAL MONITORING)

MONTH	YEAR	AVERAGE PSIG	MAXIMUM PSIG	BBL ✓	BWIPD ✓	MINIMUM PSIG	MAXIMUM PSIG
Jan.	1999	1504	1520	25296	816.00		0
Feb.	1999	1504	1520	23312	832.57		0
Mar.	1999	1560	1650	31588	1018.96		0
Apr.	1999	1657	1680	30211	1007.03		0
May	1999	1637	1650	38980	1257.41		0
June	1999	1645	1680	32489	1082.96		0
July	1999	1411	1620	29605	970.65		NA
Aug.	1999	1660	1800	29349	946.74		NA
Sept.	1999	1580	1600	29289	976.30		NA
Oct.	1999	1586	1620	31781	1025.19		20
Nov.	1999	1636	1650	28439	1220.55		1550
Dec.	1999	1660	1680	15043	895.41		450

NA=Not Available NOTE: Permit exceedances resolved per December 1999 Consent Agreement in SDWA#8-99-70

**CERTIFICATION**

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32).

NAME AND OFFICIAL TITLE (Please type or print)

 W. D. Holmes  
 Operations Manager

SIGNATURE

DATE SIGNED

February 9, 2000



Rocky Mountain Region



1501 Stampede Avenue  
Cody, WY 82414-4721  
Telephone 307/587-4961

February 10, 2000

Mr. Bahram Jafari  
U. S. Environmental Protection Agency  
Region VIII, Mail Code 8 ENF-T  
999 - 18<sup>th</sup> Street, Suite 500  
Denver, Colorado 80202

**Certified Mail**  
**Return Receipt Requested**  
**Z 301 626 053**

Re: 1999 Annual Reports  
Steamboat Butte Field  
Circle Ridge Field  
Wind River Indian Reservation

Dear Mr. Jafari:

Attached please find the EPA Annual Reports and water analyses for the above mentioned fields. As noted, the 1999 Annual Report contains permit exceedences that were previously reported to the EPA and resolved per the December 1999 Consent Agreement in SDWA #8-99-70.

Should you have any questions, please contact Mr. Charles R. Adams at the above address, or phone number (307) 527-2127.

Sincerely,

MARATHON OIL COMPANY

A handwritten signature in cursive script, appearing to read 'William D. Holmes'.

William D. Holmes  
Operations Manager  
Rocky Mountain Region

WDH:CRA:dle

Attachments

REVIEWED  
BY: Ba  
DATE: 2/15/00

Received  
Office of Enforcement

FEB 11 2000

Compliance & En. Justin

Billings • Casper • Gillette  
Holena • Rapid City**ENERGY LABORATORIES, INC.**

SHIPPING: 2393 SALT CREEK HIGHWAY • CASPER, WY 82601

MAILING: P.O. BOX 3258 • CASPER, WY 82602

E-mail: energy@trib.com • FAX: (307) 234-1639

PHONE: (307) 235-0515 • TOLL FREE: (888) 235-0515

**LABORATORY ANALYSIS REPORT  
MARATHON OIL COMPANY**Sample ID:  
Sample Date/Time:  
Sample Matrix:  
Laboratory ID:  
Report Date:**Steamboat Butte Injection Plant**

11-16-99/15:57

Water

34614-001

December 6, 1999

Non-Metals	Method	Units	Reporting Limit	Results
Total Dissolved Solids @ 180°C	SM 2540 C. Mod.	mg/L	10.0	5070
Conductivity	EPA 120.1	µmho/cm	1.0	7210
pH	SM 4500-H B.	std. units	0.10	7.23
Specific Gravity	EPA 120.1	-	-	1.004

**REVIEWED**BY: BajDATE: 2-14-00

meh r:\reports\clients99\marathon\_oil\water\34614-001r1.xls

2000

FEB 14 2000

Compliance &amp; Env. Justice

**COMPLETE ANALYTICAL SERVICES**



1501 Stampede Avenue  
Cody, WY 82414-4721  
Telephone 307/587-4961

February 10, 2000

Mr. Bahram Jafari  
U. S. Environmental Protection Agency  
Region VIII, Mail Code 8 ENF-T  
999 - 18<sup>th</sup> Street, Suite 500  
Denver, Colorado 80202

**Certified Mail**  
**Return Receipt Requested**  
**Z 301 626 053**

Re: 1999 Annual Reports  
Steamboat Butte Field  
Circle Ridge Field  
Wind River Indian Reservation

Dear Mr. Jafari:

Attached please find the EPA Annual Reports and water analyses for the above mentioned fields. As noted, the 1999 Annual Report contains permit exceedences that were previously reported to the EPA and resolved per the December 1999 Consent Agreement in SDWA #8-99-70.

Should you have any questions, please contact Mr. Charles R. Adams at the above address, or phone number (307) 527-2127.

Sincerely,

MARATHON OIL COMPANY

A handwritten signature in cursive script, appearing to read 'William D. Holmes'.

William D. Holmes  
Operations Manager  
Rocky Mountain Region

WDH:CRA:dle

Attachments

REVIEWED

BY: Baj  
DATE: 2/15/00

Receiver:  
Office of Enforcement

FEB 10 2000

Compliance & Env. Justice



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

# WELL REWORK RECORD

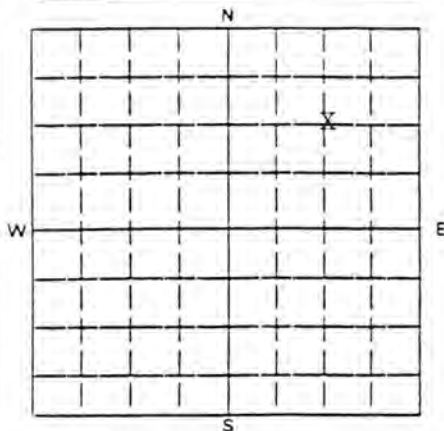
NAME AND ADDRESS OF PERMITTEE

Marathon Oil Company  
1501 Stampede Ave.  
Cody, Wyoming 82414

NAME AND ADDRESS OF CONTRACTOR

R & S Well Service  
P. O. Box 1148  
Thermopolis, Wyoming 82443

LOCATE WELL AND OUTLINE UNIT ON  
SECTION PLAT — 640 ACRES



STATE

WY

COUNTY

Fremont

PERMIT NUMBER

WY2000-02141

SURFACE LOCATION DESCRIPTION

1/4 of 1/4 of SW 1/4 of NE 1/4 of Section 5 Township 3N Range 1W

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface Location 1600 ft. from (N/S) N Line of quarter section  
and 1600 ft. from (E/W) E Line of quarter section

WELL ACTIVITY

- ☐ Brine Disposal  
☒ Enhanced Recovery  
☐ Hydrocarbon Storage

Lease Name

Tribal E

Total Depth Before Rework

7,296'

Total Depth After Rework

7,296'

Date Rework Commenced

12/01/99

Date Rework Completed

12/08/99

TYPE OF PERMIT

- ☒ Individual  
☐ Area  
Number of Wells \_\_\_\_\_

Well Number

30

## WELL CASING RECORD — BEFORE REWORK

Casing		Cement		Perforations		Acid or Fracture Treatment Record
Size	Depth	Sacks	Type	From	To	
9-5/8	1,024	300	'H'			
5-1/2	7,296	1,290	'H'	6,991	7,016	
				7,036	7,052	
				7,110	7,120	
				7,138	7,148	

## WELL CASING RECORD — AFTER REWORK (Indicate Additions and Changes Only)

Casing		Cement		Perforations		Acid or Fracture Treatment Record
Size	Depth	Sacks	Type	From	To	

REVIEWED

BY: Bay

DESCRIBE REWORK OPERATIONS IN DETAIL  
USE ADDITIONAL SHEETS IF NECESSARY

WIRE LINE LOGS. LIST EACH TYPE

DATE: 12/21/99

Log Types

Logged Intervals

Pulled injection equipment. Round trip scraper to 7001'. Replaced bad tubing. Re-run injection equipment, setting 5-1/2" packer at 6895'. The MIT, well activity report and wellbore diagram are attached.

## CERTIFICATION

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32).

NAME AND OFFICIAL TITLE (Please type or print)

Randy P. Meabon  
Regulatory Coordinator

SIGNATURE

Randy P. Meabon by FMK

DATE SIGNED

12/14/99



# Mechanical Integrity Test

## Casing or Annulus Pressure Mechanical Integrity Test

U.S. Environmental Protection Agency  
Underground Injection Control Program, UIC Direct Implementation Program 8P-W-GW  
999 16<sup>th</sup> Street, Suite 500 Denver, CO 80202-2466

EPA Witness: \_\_\_\_\_

Test conducted by: R. C. Trucks Inc. BranchDate: 12/18/99

Others present: \_\_\_\_\_

Well Name: <u>E-30</u>	Type: <u>(ER)</u> SWD	Status: <u>(AC)</u> UC
Field: <u>Steamboat Butte</u>		
Location: <u>SUNB</u> Sec: <u>5</u> T: <u>3</u> N: <u>S</u> R: <u>L</u> E: <u>W</u>	County: <u>Fremont</u>	State: <u>WY</u>
Operator: <u>Marathon Oil Company</u>		
Last MIT: <u>11/12/99</u>	Maximum Allowable Pressure: <u>1860</u>	PSIG

Is this a regularly scheduled test? ☐ Yes ☒ NoInitial test for permit? ☒ Yes ☐ NoTest after well rework? ☒ Yes ☐ NoWell injecting during test? ☐ Yes ☒ No

REVIEWED  
BY: Bay NW  
DATE: 12/21/99 bpd 6/22/00

Pre-test casing/tubing annulus pressure: 0 psig

MIT DATA TABLE		Test #1	Test #2	Test #3
TUBING PRESSURE				
Initial Pressure	<u>?</u> psig	psig	psig	psig
End of test pressure	<u>?</u> psig	psig	psig	psig
CASING / TUBING ANNULUS PRESSURE				
0 minutes	<u>1000</u> psig	psig	psig	psig
5 minutes	<u>995</u> psig	psig	psig	psig
10 minutes	<u>990</u> psig	psig	psig	psig
15 minutes	<u>990</u> psig	psig	psig	psig
20 minutes	<u>985</u> psig	psig	psig	psig
25 minutes	<u>980</u> psig	psig	psig	psig
30 minutes	<u>980</u> psig	psig	psig	psig
minutes	psig	psig	psig	psig
minutes	psig	psig	psig	psig
RESULT	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail

Does the annulus pressure build back up after the test? ☐ Yes ☒ No

1201

Will call them  
Re these pressures

## MECHANICAL INTEGRITY PRESSURE TEST

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

about 1 barrel to pressure up after hole full, about 1 barrel back

Signature of Witness: George N Balda Shoshone Tribal Member

### OFFICE USE ONLY - COMPLIANCE FOLLOWUP

Staff

Date

Do you agree with the reported test results?

☒ YES

☐ NO

If not, why?

Possible violation identified?

☐ YES

☐ NO

If YES, what?

If YES - followup initiated?

☐ YES

☐ NO - why not?

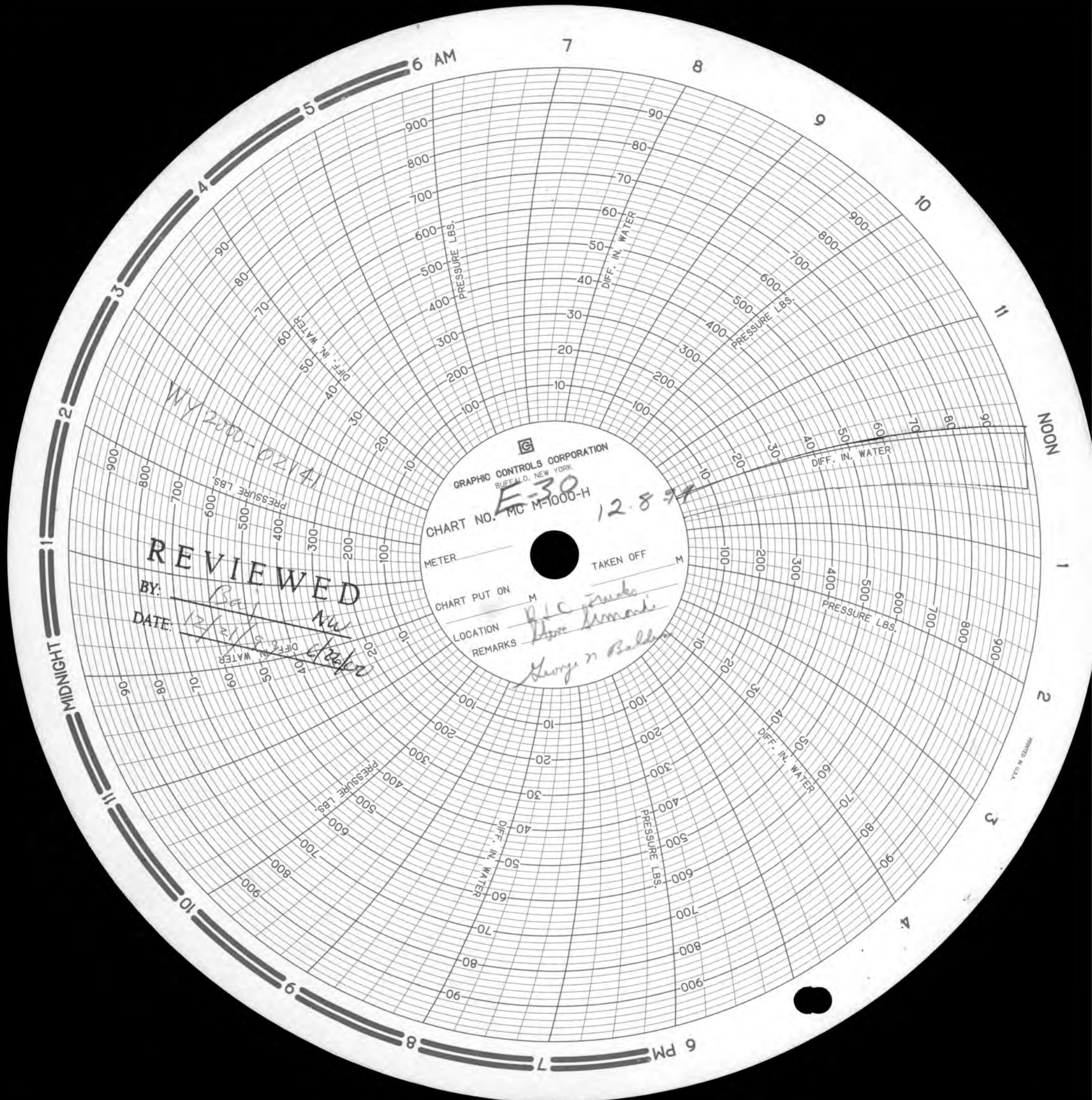
☐ Data Entry

☐ Compliance Staff

☐ 2<sup>nd</sup> Data Entry

☐ Hardcopy Filing





13-DEC-1999  
01:51:34 PM

MOC MORNING REPORT  
ACTIVITY REPORT FOR TRIBAL E 30  
FROM 24-NOV-1999 TO 12-DEC-1999

Page: 2  
REGION: RMR

FIELD: STEAMBOAT BUTTE

OPR PROP: STEAMBOAT BUTTE

INTENT: DOWNHOLE OTHER

24-NOV-1999 Shut well on due to pressure on backside.

SHUT-IN/RIG DATA

SI DATE	MIRU DATE	RIG NAME	RIG#
24-NOV-1999			

01-DEC-1999 MIRU R&S #26. Charlie Adams got permission from Bahrm Jafari with the EPA on 11/30/99 to release packer. Released packer and POH.

SHUT-IN/RIG DATA

SI DATE	MIRU DATE	RIG NAME	RIG#
24-NOV-1999	01-DEC-1999	R&S WELL SERVICE	26

02-DEC-1999 Finished POH with packer. RIH with 5 1/2" scraper to 7001'. POH with scraper to 2100'. SION.

SHUT-IN/RIG DATA

SI DATE	MIRU DATE	RIG NAME	RIG#
24-NOV-1999	01-DEC-1999	R&S WELL SERVICE	26

03-DEC-1999 POH with wet string. Bit, scraper and bottom joint of tubing was plugged with scale. RIH with RTTS packer and tubing tester. Set packer at 6943'. Filled annulus with 45 bbl of water. PT annulus to 500 psi and lost 200 psi in 30 seconds. Reset packer at 6912' and filled annulus with 6 bbl of water. PT to 1000 psi and lost 800 psi in 5 minutes. Too dark to test tubing. SION.

SHUT-IN/RIG DATA

SI DATE	MIRU DATE	RIG NAME	RIG#
24-NOV-1999	01-DEC-1999	R&S WELL SERVICE	26

04-DEC-1999 Closed tubing tester and filled with 10 bbl of water. PT tubing to 1000 psi and lost 600 psi in 5 minutes. PT tubing and pumped in at 0.5 BPM and 1200 psi. Released packer and POH with wet string while LD tubing. Found hole in tubing as shown below. Pulled to 101 joints and found 2 joints of tubing plugged with scale. Finished LD tubing. SION.

SHUT-IN/RIG DATA

SI DATE	MIRU DATE	RIG NAME	RIG#
24-NOV-1999	01-DEC-1999	R&S WELL SERVICE	26

FAILURE DATA

FAILED EQUIP: INJ TUBING	LOCATION: BODY
SIZE: 2 7/8	DEPTH #JTS: 30 LINER:
TYPE OF FLR: HOLE	FLR CAUSE: INT CORROSION
CURRENT RIG: R&S 26	COST: 0
COMMENTS:	

07-DEC-1999 RIH with 5 1/2" Model R packer, 2 7/8" SN, 218 joints of 2 7/8" IC tubing and 10 joints of 2 7/8" regular tubing. Ran SV in place. PT tubing to 1500 psi and it held for 15 minutes. Fished SV. SION.

SHUT-IN/RIG DATA

SI DATE	MIRU DATE	RIG NAME	RIG#
24-NOV-1999	01-DEC-1999	R&S WELL SERVICE	26

INTENT: UIC

08-DEC-1999 RU R&C truck with chart recorder. Pump 130 bbls produced water. Set packer at 6895'. Pressured annulus to 1000 psi, dropped 20 psi in 30 min. NU injection lines. RDMO R&S #26. Will request written approval from the EPA to commence injection.



13-DEC-1999  
01:51:35 PM

8 8  
MORNING REPORT  
ACTIVITY REPORT FOR TRIBAL E 30  
FROM 24-NOV-1999 TO 12-DEC-1999

Page: 3  
REGION: RMR

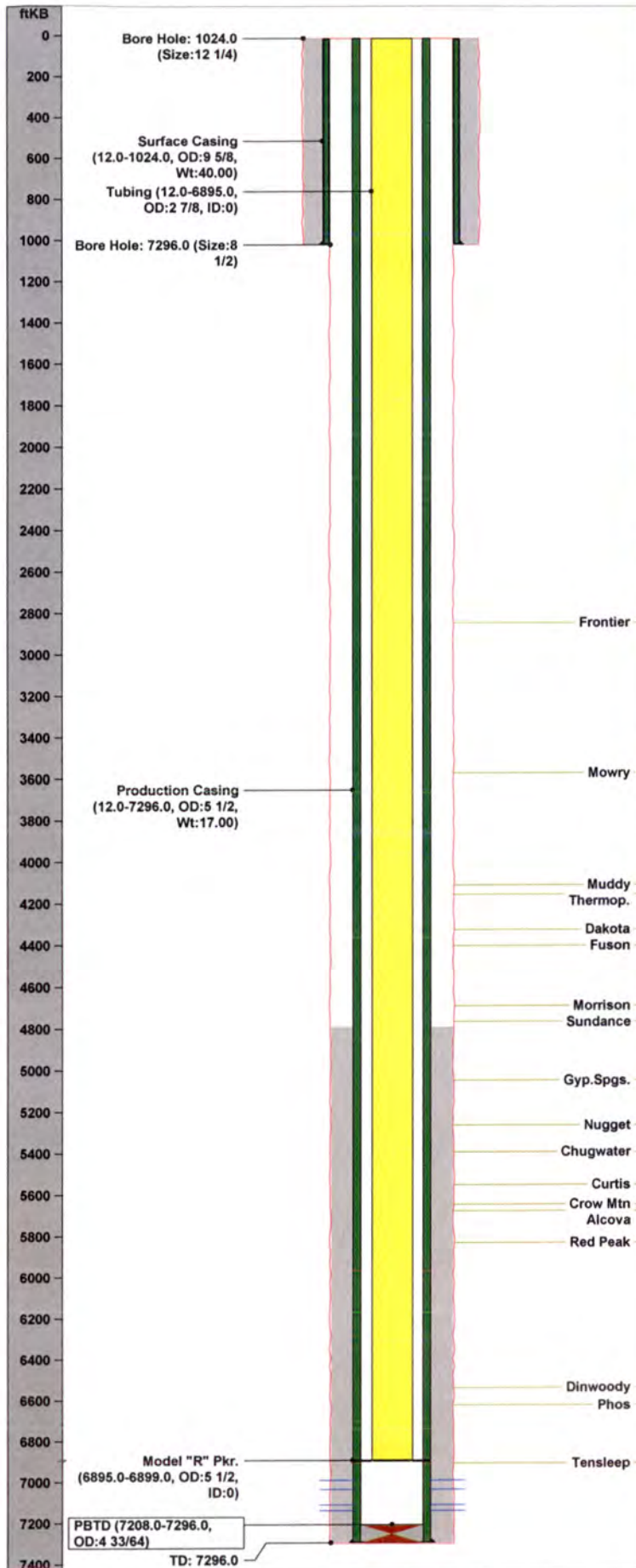
FIELD: STEAMBOAT BUTTE

OPR PROP: STEAMBOAT BUTTE

SHUT-IN/RIG DATA	
SI DATE	MIRU DATE
24-NOV-1999	01-DEC-1999
RIG NAME	RIG#
R&S WELL SERVICE	26

UIC TEST DATA  
TEST PRESSURE(psi): 1000    TIME(minutes): 30    STATE WITNESS: YES

# MARATHON OIL COMPANY

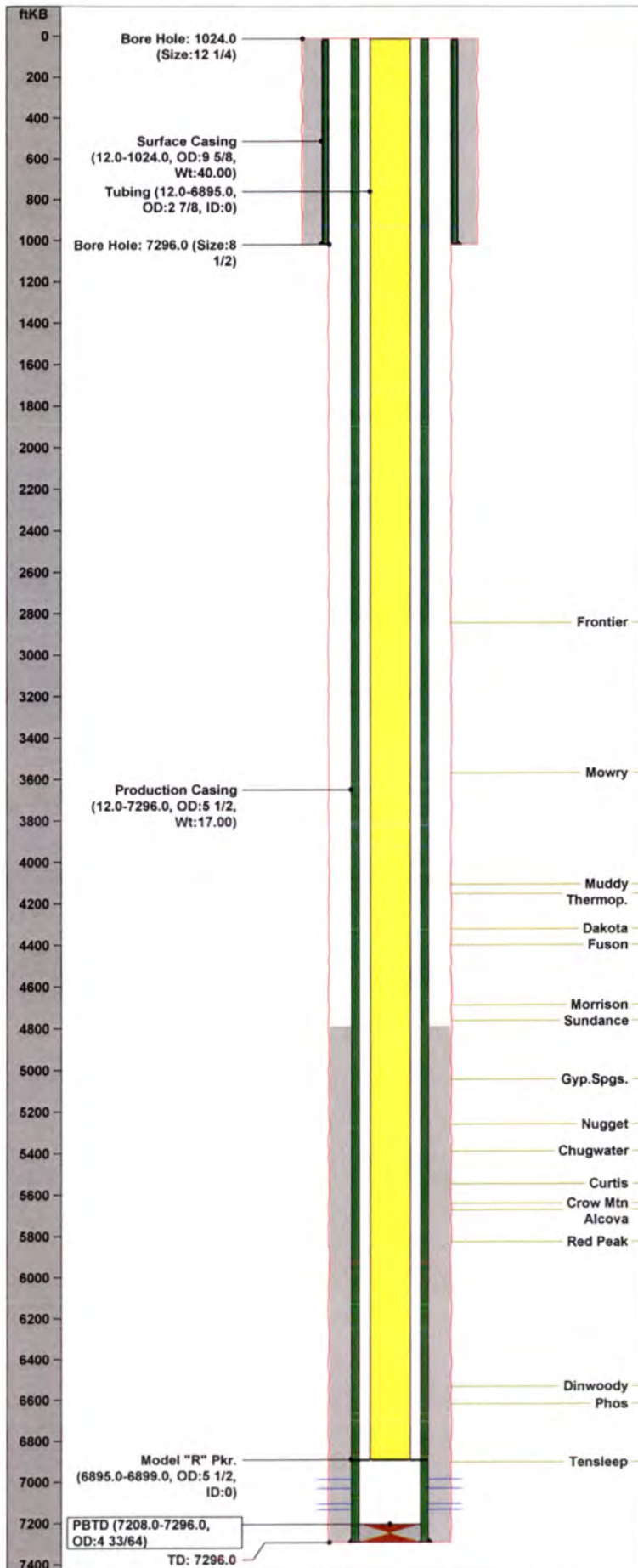


Tribal E-30						
API Code	49-013-21402	Field Code				
TD	7296.0 ftKB	Basin				
PBDT	7208.0 ftKB	Basin Code				
Operator	Marathon Oil Company	Permit				
State	Wyoming	Spud		1/29/84		
County	Fremont	Finish Drl		3/1/84		
Permit No.	WY2000-02141	Completion				
TD Measured		Abandon				
Reservoir	Tensleep					
Field	STEAMBOAT BUTTE					
Location						
Meridian	Wind River	Top Latitude		0		
Twnship	3 North	Top Longitude		0		
Range	1 West	Top NS Distance				
Section	1600' FNL, 1600' FEL Sec.5	Top EW Distance				
Quarter	SW NE Sec.5	Bottom Latitude		0		
		Bottom Longitude		0		
		Btm NS Distance				
		Btm EW Distance				
Elevations						
KB	5690.0 ft	Cas Flng				
Grd	5678.0 ft	Tub Head				
KB-Grd	12.0 ft					
Casing String - Surface Casing						
Item (in)	Btm (ftKB)	Jnts	ID	Wt	Grd	Thd
9 5/8 in Surface Casing	1024.0		8 53/64	40.00	K-55	
Casing String - Production Casing						
Item (in)	Btm (ftKB)	Jnts	ID	Wt	Grd	Thd
5 1/2 in Production Casing	7296.0		4 57/64	17.00	L-80	
Casing Cement						
Casing String	Top (ftKB)	Amount (sx)	Comments			
Surface Casing	12.0	300				
Production Casing	4794.0	1290	TOC by CBL			
Perforations						
Date	Int	Zone	Shots (/ft)	Type		
3/27/84	6991.0 - 7016.0	Tensleep	4.0	HSC		
3/27/84	7036.0 - 7052.0	Tensleep	4.0	HSC		
3/27/84	7110.0 - 7120.0	Tensleep	4.0	HSC		
3/27/84	7138.0 - 7148.0	Tensleep	4.0	HSC		
Tubing String - Injection Equipment						
Item (in)	Top (ftKB)	Len (ft)	Jnts	ID (in)	Wt	Grd Thd
2 7/8 in Tubing	12.0	6883.0		0		
5 1/2 in Model "R" Pkr.	6895.0	4.0		0		
Other (plugs, equip., etc.) - Plug Back						
Date	Item			Int (ftKB)		
3/26/84	PBDT			7208.0 - 7296.0		
Formation/Horizon Tops						
Top (ftKB)	TVD (ftKB)	Formation	Code	frm.user3	Source	
2847.0	0.0	Frontier				
3574.0	0.0	Mowry				
4113.0	0.0	Muddy				
4158.0	0.0	Thermop.				
4327.0	0.0	Dakota				
4405.0	0.0	Fuson				
4693.0	0.0	Morrison				
4769.0	0.0	Sundance				
5050.0	0.0	Gyp. Spgs.				
5266.0	0.0	Nugget				
5394.0	0.0	Chugwater				
5552.0	0.0	Curtis				
5646.0	0.0	Crow Mtn				
5677.0	0.0	Alcova				
5832.0	0.0	Red Peak				
6538.0	0.0	Dinwoody				
6624.0	0.0	Phos				
6908.0	0.0	Tensleep				
General Notes						
Date	Note					
11/24/99	Well found with pressure on the backside. Shut-in well and notify Bahram Jafari of the EPA.					

Tribal E-30

pg. 1 of 2

# MARATHON OIL COMPANY



General Notes (con't)	
Date	Note
12/1/99	Pulled injection string. Round tripped scraper to 7001'. Found bad tbg. at the 30th joint from surface. Pressure tested tbg. okay to 1500 psi for 15 minutes. Ran 5 1/2" packer on 2 7/8" tbg. setting the packer at 6895'.
12/8/99	Conducted MIT okay to 1000 psi for 30 minutes witnessed by Mr. George Baldes, a Shoshone Tribal member.





**Marathon  
Oil Company**

Compliance & Env. Justice

1501 Stampede Avenue  
Cody, WY 82414-4721  
Telephone 307/587-4961

December 13, 1999

Mr. Bahram Jafari  
US Environmental Protection Agency  
Mail Code 8ENF-T  
999 18<sup>th</sup> Street, Suite 500  
Denver CO 80202-2466

RECEIVED  
OFFICE OF ENFORCEMENT  
DEC 20 1999

Certified Mail  
Return Receipt Requested  
Z 301 626 040

RE: Underground Injection Control  
Tribal E-30 EPA # WY2000-02141  
SW NE Sec.5, T3N, R1W  
Steamboat Butte Field  
Wind River Indian Reservation

*cc - mail & voice mail  
granting permission to  
Marathon to resume injection  
Bahram Jafari  
Carol*

## INJECTION STRING REPAIR AND REQUEST PERMISSION TO RESUME INJECTION

Dear Mr. Jafari,

Marathon Oil Company would like to inform EPA Compliance about the injection string repair for the above UIC well, Tribal E-30, in the Steamboat Butte Field.

During investigation it was determined that there was a tubing failure at this well. After the repair, the injection equipment was re-run as indicated on the well bore diagram. Additionally attached is the Well Rework Record, a well activity report for this well, and the successful MIT with chart witnessed by Mr. George Baldes, a Shoshone Tribal member.

Marathon Oil Company requests permission to resume injection into this well after EPA review of the necessary documents and the confirmation that there is no further actions required on this well due to the compliance issue from October 1, 1999.

Should you require additional information, please contact Charles R. Adams at the above letter head address or phone (307)527-2127.

Sincerely,

MARATHON OIL COMPANY

*Randy P. Meabon by Fax*

Randy P. Meabon  
Regulatory Coordinator

RPM/CRA/DLC (3156-12)  
E30Repair.doc  
Attachments

REVIEWED

BY: *Bay*

DATE: *12/21/99*

XC: Ms. Carol Bowden - EPA, 999 18<sup>th</sup> Street-Suite 500, Denver CO 80202-2466  
K.J. Iler, T.E. Fitzsimmons, M.E. Blakesley, J.F. Salomonsen-Steamboat Field Office, & "WRF"





**Marathon  
Oil Company**

1501 Stampede Avenue  
Cody, WY 82414-4721  
Telephone 307/587-4961

December 1, 1999

Mr. Bahram Jafari  
US Environmental Protection Agency  
Mail Code 8ENF-T  
999 18<sup>th</sup> Street, Suite 500  
Denver CO 80202-2466

RE: Tribal E-30 EPA # WY2000-02141  
SW NE Sec.5, T3N, R1W  
Steamboat Butte Field  
Wind River Indian Reservation

REVIEWED  
BY: Baj  
DATE: 1/12/00

**Suspected Injection String Failure**

Dear Mr. Jafari,

Marathon Oil Company would like to follow up to EPA Compliance about a suspected injection string failure per phone message and e-mail submitted November 24, 1999. The Tribal E-30 well in the Steamboat Butte Field on the Wind River Reservation was noticed on November 24, 1999, with approximately 1550 psig pressure on the backside and approximately 1650 psig on the tubing. The well had no pressure on the backside during the proceeding week. The well was immediately shut-in and the EPA compliance staff notified. A copy of the procedure for the repair has been attached.

Following the repair, a MIT will be performed and a Well Rework Record (EPA Form 7520-12) along with a well bore diagram will be submitted within 30 days of the operation. Additionally, this was a well on the compliance issue previously issued and Marathon would like to confirm that no other action is needed on this well in order to resume injection after the repair.

Should you require additional information, please contact me at the above letter head address or phone (307)527-2127.

Sincerely,

MARATHON OIL COMPANY

*Charles R. Adams*  
Charles R. Adams  
Adv.Engr.Tech.

CRA/ (3156-12)  
E30TbgFail.doc  
Attachment

xc: Ms. Carol Bowden, EPA, 999 18<sup>th</sup> Street-Suite 500, Denver CO 80202-2466  
K.J. Iler, T.E. Fitzsimmons, M.E. Blakesley, & "WRF"

Received  
Office of Enforcement

DEC - 6 1999

Compliance & Env. Justice

Ces

(WRF-999)  
R. B. Lane  
November 30, 1999

Approvals		
Needed		Rcv'd
	AFE	
	Surf Sundry	
X	DH Sundry	
X	407	
	NPDES	
	Pit Sundry	

**Tribal E #30  
Steamboat Butte Field  
Injection Well Repair Procedure**

**WELL DATA:**

**Location:** 1600' FNL, 1600' FEL, Sec. 5, T3N, R1W Fremont County, Wyoming

**Elevation:** GL: 5678' KB: 5690'

**Depth:** TD: 7296' PBTD: 7208'

**Casing:**

Surface.....9 $\frac{5}{8}$ ", 40#, K-55 set @ 1024' with 300 sxs cement.

Production .....5 $\frac{1}{2}$ ", 17#, L-80, set @ 7296' with 1290 sxs cement. Cement top at 4794' from KB by CBL.

**Perforations:**

Tensleep      6991' – 7016' (4 SPF)  
7036' – 7052' (4 SPF)  
7110' – 7120' (4 SPF)  
7138' – 7148' (4 SPF)

**Proposed Status:** Active Tensleep Injector

**Estimated Well Cost:** \$

**JUSTIFICATION:**

This well has experienced a MIT failure resulting in a pressure increase on the casing/tubing annulus. The well will be pulled to determine the source of the failure, repaired and returned to active injection status.

**PROCEDURE:**

1) MIRU.

- 2) Call the EPA, notify them of the well conditions and ask if they want to be notified 24 hours before the MIT (step 7) so that they can witness it. If they do not want to witness the MIT, then ask a Tribal member to witness the test. (Include this phone call in the MRP.) Haul two additional joints of 27/8" tubing to location to allow the packer seating depth to be within 100' of the top perforation.
- 3) Release the Baker model 'R' packer and TOOH standing back the injection tubing. LD the packer and send it in to be redressed. PU and RT a 5 1/2 casing scraper to the top perforation.
- 4) PU a 5-1/2" RTTS packer and a SN and TIH on the end of the injection tubing with a SV in place. PT the tubing to 2000 psi. If the tubing has a leak, change out leaking joints.
- 5) Set the packer at approximately 6950'. PT the annulus to 1000 psi. Report results to Brad Lane and Charlie Adams. If casing leaks exist, notify Brad Lane and repair leaks.
- 6) When repaired, RIH with the Baker model 'R' packer, 1 joint of 27/8 tubing, 2.25" ID 'F' nipple, 221 joints 27/8" tubing. Set the packer at approximately 6902'. NU wellhead.
- 7) Load backside with packer fluid. Conduct a MIT witnessed by the EPA or a Tribal member. Pressure test to 1000 psi for 30 minutes, and record the test on a chart.
- 8) Obtain approval from the EPA to resume injection and POI. RDMO. Record rate and pressure and report to Brad Lane.

cc: JFS  
CRA  
EWS - Steamboat  
RPM  
KKS  
'WRF'

APPROVED: Tom H 11-30-99 TEFitz

APPROVED: D.J. Haman 12/1/99 DJH

API# 49-013-21402

STEAMBOAT BUT FIELD - TRIBAL Ei-30

KB = 5690'

GL = 5678'

LOCATION = SEC. 5, T3N, R1W  
1600' FEL & 1600' FNL  
FREMONT COUNTY, WYOMINGJULY 1984 - Initial completion as a  
Tensleep water injection well.9-5/8" 40#/ft, K-55 csg  
set at 1024'w/300 sxs cmt

TOC at 4794' (CBL)

Tensleep Perfs

4 spf from 6991 to 7016'

4 spf from 7036 to 7052'

4 spf from 7110 to 7120'

4 spf from 7138 to 7148'

Baker Mdl "F" Seating Nipple

Baker Mdl R3 Double Grip Pkr at 6883'

PBSD - 7208'

5-1/2" 17 #/ft, L-80 csg  
set @ 7296'w/1290 sxs cmt

TD - 7296'

Completion Date: 7/2/84

Well Type: Injector

Drawn By: R. B. Lane

Date Prepared: 11-30-99





1501 Stampede Avenue  
Cody, WY 82414-4721  
Telephone 307/587-4961

November 9, 1999

Ms. Carol Bowden  
US Environmental Protection Agency  
999 18<sup>th</sup> Street – Suite 500  
Denver CO 80202-2466

Compliance & Env. Justice

NOV 15 1999

Received  
Office of Enforcement

RE: Tribal E-30 EPA #WY2000-02141  
SW NE Sec.5, T3N, R1W  
Steamboat Butte Field  
Wind River Indian Reservation  
Fremont County, Wyoming

Dear Ms. Bowden,

Attached find a mechanical integrity test conducted on November 2, 1999, for the Tribal E-30 well on the Wind River Indian Reservation and witnessed by Mr. George N. Baldes, a Shoshone Tribal member. Additional witnesses included Mr. Richard Burnette and Mr. Chester Pingree of the Shoshone Oil and Gas Commission.

Please respond by return mail to the above letter head address or phone (307)527-2087 if I may be of further assistance or if additional actions are required for this well.

Thank you for your prompt attention to this matter.

Sincerely,

MARATHON OIL COMPANY

A handwritten signature in cursive script that reads 'Charles R. Adams'.

Charles R. Adams  
Adv.Engr.Tech.

CRA/(3156-12)  
E30MIT.doc  
Attachment

xc: K.J. Iler  
T.E. Fitzsimmons  
Mr. Bahram Jafari, EPA, Mail Code 8ENF-T, 999 18<sup>th</sup> Street – Suite 500, Denver CO 80202-2466

8 . . . 9

7

10

11

NOON

1

2

3

4

5

6 PM

7

8

9

10

11

MIDNIGHT

GRAPHIC CONTROLS CORPORATION  
BUFFALO, NEW YORK

CHART NO. MC M-1000-H

METER

CHART PUT ON

LOCATION

REMARKS

TAKEN OFF

11-6-1 E-30  
11-2-99

*Handwritten signature*



# Mechanical Integrity Test

## Casing or Annulus Pressure Mechanical Integrity Test

U.S. Environmental Protection Agency  
Underground Injection Control Program, UIC Direct Implementation Program 8P-W-GW  
999 18<sup>th</sup> Street, Suite 500 Denver, CO 80202-2466

5662  
EPA Witness: Kelvin O. Bennett & Chester L. Jones Date: 11/2/99  
Test conducted by: R+C Trucking  
Others present: Steve L. Simonds - Tester

Well Name: <u>Tribal E #30</u>	Type: <u>ER</u> SWD	Status: AC <u>TA</u> UC
Field: <u>Steamboat Butte</u>		
Location: <u>SW NE</u> Sec: <u>5</u> T <u>3</u> <u>N</u> /S R <u>1</u> E <u>W</u> County: <u>Fremont</u> State: <u>WY</u>		
Operator: <u>Marathon Oil CO.</u>		
Last MIT: <u>10/21/93</u> Maximum Allowable Pressure: <u>1860</u> PSIG		

Is this a regularly scheduled test? ☒ Yes ☐ No

Initial test for permit? ☐ Yes ☒ No

Test after well rework? ☐ Yes ☒ No

Well injecting during test? ☒ Yes ☐ No If Yes, rate: 1205 bpd

Pre-test casing/tubing annulus pressure: 0 psig

MIT DATA TABLE	Test #1	Test #2	Test #3
<b>TUBING PRESSURE</b>			
Initial Pressure	<u>1550</u> psig	psig	psig
End of test pressure	<u>1550</u> psig	psig	psig
<b>CASING / TUBING ANNULUS PRESSURE</b>			
0 minutes	<u>1000</u> psig	psig	psig
5 minutes	<u>1000</u> psig	psig	psig
10 minutes	<u>1000</u> psig	psig	psig
15 minutes	<u>1000</u> psig	psig	psig
20 minutes	<u>1000</u> psig	psig	psig
25 minutes	<u>1000</u> psig	psig	psig
30 minutes	<u>995</u> psig	psig	psig
minutes	psig	psig	psig
minutes	psig	psig	psig
<b>RESULT</b>	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail

Does the annulus pressure build back up after the test? ☐ Yes ☒ No



# MECHANICAL INTEGRITY PRESSURE TEST

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

About a barrel to test. About a barrel bled back.

Signature of Witness:

George N. Balles, Houston, Enrolled

## OFFICE USE ONLY - COMPLIANCE FOLLOWUP

Staff \_\_\_\_\_

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Do you agree with the reported test results? ☐ YES ☐ NO

If not, why? \_\_\_\_\_

Possible violation identified? ☐ YES ☐ NO

If YES, what \_\_\_\_\_

If YES - followup initiated? ☐ YES \_\_\_\_\_

☐ NO - why not? \_\_\_\_\_

☐ Data Entry

☐ Compliance Staff

☐ 2<sup>nd</sup> Data Entry

☐ Hardcopy Filing



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

## ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT

NAME AND ADDRESS OF EXISTING PERMITTEE

MARATHON OIL COMPANY  
1501 STAMPEDE AVENUE  
CODY, WYOMING 82414-4721

NAME AND ADDRESS OF SURFACE OWNER

JOINT BUSINESS COUNCIL  
P.O. BOX 217  
FORT WASHAKIE, WY 82514LOCATE WELL AND OUTLINE UNIT ON  
SECTION PLAT — 640 ACRES

N									
S									

W E

STATE

WY

COUNTY

FREMONT

PERMIT NUMBER

WY2000-02141

SURFACE LOCATION DESCRIPTION

¼ OF SW ¼ OF NE ¼ SECTION 5 TOWNSHIP 3N RANGE 1W

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface 1600  
Location ft. from (N/S) N Line of quarter section (SEE ATTACHMENT)

and 1600 ft. from (E/W) E Line of quarter section

WELL ACTIVITY

TYPE OF PERMIT

☐ Brine Disposal☐ Individual☒ Enhanced Recovery☐ Area☐ Hydrocarbon Storage

Number of Wells 19

RULE AUTHORIZED

Lease Name 14-20-0258-06504

Well Number TRIBAL E #30

1860

INJECTION PRESSURE

TOTAL VOLUME INJECTED

TUBING — CASING ANNULUS PRESSURE  
(OPTIONAL MONITORING)

MONTH	YEAR	AVERAGE PSIG	MAXIMUM PSIG	BBL	MCF	MINIMUM PSIG	MAXIMUM PSIG
Jan.		1,750		29,818			
Feb.		1,752		26,922			
Mar.		1,624		20,832			
Apr.		1,703		42,830			
May		1,648		36,242			
June		1,761		48,650			
July		1,785		41,637			
Aug.		1,798		34,458			
Sept.		1,810		28,934			
Oct.		1,784		43,040			
Nov.		1,576		24,868			
Dec.		1,510		25,236			

REVIEWED

BY:

DATE:

## CERTIFICATION

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32).

NAME AND OFFICIAL TITLE (Please type or print)

R.P. Meabon  
Regulatory Coordinator

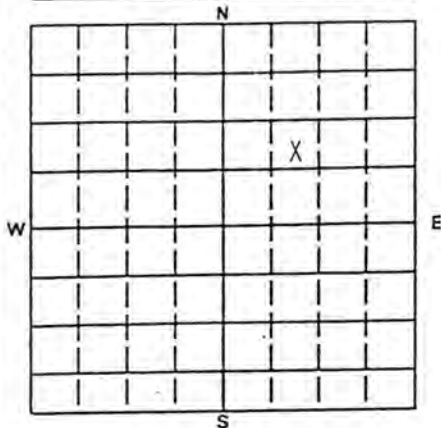
SIGNATURE

DATE SIGNED

2/8/99

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

## ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT

NAME AND ADDRESS OF EXISTING PERMITTEE  
MARATHON OIL COMPANY  
1501 STAMPEDE AVENUE  
CODY, WYOMING 82414-4721NAME AND ADDRESS OF SURFACE OWNER  
JOINT BUSINESS COUNCIL  
P.O. BOX 217  
FORT WASHAKIE, WY 82514MAR 10 1998  
WY02141LOCATE WELL AND OUTLINE UNIT ON  
SECTION PLAT — 640 ACRES

STATE

WY

COUNTY

FREMONT

PERMIT NUMBER

WY02141-2000

SURFACE LOCATION DESCRIPTION

1/4 OF SW 1/4 OF NE 1/4 SECTION 5 TOWNSHIP 3N RANGE 1W

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface Location 1600 ft. from (N/S) N Line of quarter section (SEE ATTACHMENT)  
and 1600 ft. from (E/W) E Line of quarter section

WELL ACTIVITY

- ☐
- Brine Disposal
- 
- ☒
- Enhanced Recovery
- 
- ☐
- Hydrocarbon Storage

TYPE OF PERMIT

- ☐
- Individual
- 
- ☐
- Area
- 
- Number of Wells 19

RULE AUTHORIZED

Lease Name 14-20-0258- 06504

Well Number TRIBAL E #30

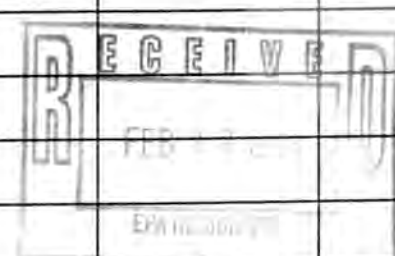
1860

INJECTION PRESSURE

TOTAL VOLUME INJECTED

TUBING — CASING ANNULUS PRESSURE  
(OPTIONAL MONITORING)

MONTH	YEAR	AVERAGE PSIG	MAXIMUM PSIG	BBL	MCF	MINIMUM PSIG	MAXIMUM PSIG
Jan.	1997	0		0			
Feb.		0		0			
Mar.		0		7280			
Apr.		1680		62379			
May		1692		33523			
June		1680		24609			
July		1771		41981			
Aug.		1770		26662			
Sept.		1780		17923			
Oct.		1761		32683			
Nov.		1736		35959			
Dec.		1575		33400			



REVIEWED

BY

DATE

2/18/98

## CERTIFICATION

316399

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32).

NAME AND OFFICIAL TITLE (Please type or print)

R.P. Meabon  
Regulatory Coordinator

SIGNATURE

R.P. Meabon

DATE SIGNED

2/12/98

HAUCK ANALYTICAL SERVICES  
613 MEADOWLARK LANE  
RIVERTON, WYOMING 82501  
307-856-8183

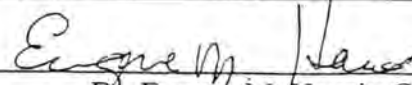
April 26, 1997

Marathon Oil Company  
1501 Stampede Avenue  
Cody, Wyoming 82414

ATTN: Marvin Blakeksley

ANALYTICAL RESULTS

SAMPLE NUMBER	172	173	174	175
SAMPLE IDENTIFICATION	Steamboat Butte North	Steamboat Butte South	Circel Ridge Battery	Maverick Springs Battery
WYOMING PERMIT NUMBER	WY-33740	WY-33758	WY-949	WY-779
DATE	March 19	March 19	March 21	March 15
TIME	2:00 PM	2:30 PM	10:00 AM	10:30 AM
INITIALS	B.S.	B.S.	B.S.	B.S.
PH (pH units) EPA Method 150.1	7.4	7.9	7.8	7.9
TOTAL DISSOLVED SOLIDS (mg/l) EPA Method 160.1	4670	2880	710	1050
CONDUCTIVITY ( $\mu$ mhos at 25°C) EPA Method 120.1	6600	4200	1210	1490
CHLORIDE (mg/l) SM 407A	982	474	69.7	35.7
SULFATE (mg/l) EPA Method 375.4	1560	1160	189	462



Dr. Eugene M. Hauck, Chemist









A Well Number: WY02141

U.S. ENVIRONMENTAL PROTECTION AGENCY  
REGION VIII  
40 CFR 144.21, SUBPART C  
AUTHORIZATION OF UNDERGROUND INJECTION BY RULE

FILE REVIEW SUMMARY

Preparation Date: 12/27/90 Prepare By: C. Williams

WELL IDENTIFICATION INFORMATION

Well Name: E. 30 Completion Date: 3-1-84

Status Date: \_\_\_\_\_

Status: ☒ AC; \_\_\_\_\_ TA; \_\_\_\_\_ PA; \_\_\_\_\_ TA > 2 yrs. Date Converted to Injection Well: \_\_\_\_\_

Well Location: 1600 feet from N line; 1600 feet from E line; SW /4; NE /4

Section: 5 Township: 3N Range: 1W County: Fremont

Field Name: Steamboat Butte

OPERATOR NAME & MAILING ADDRESS: Mr. D.F. Forsgren

Chevron U.S.A. Inc.

Phone: (303) 930-3000 P.O. Box 599

Denver, CO 80201

Sources of information used in this review are abbreviated as shown below. Other sources of information should be explicitly cited.

BIA = Bureau of Indian Affairs  
BLM = Bureau of Land Management  
FI = Field Inspection by EPA  
FURS = Federal UIC Reporting System  
MF = Microfiche copies of MTOGCC Records  
PD = Program Description and Attachments  
OF = Inspection of Operator Files  
OS = Operator Submittal  
SMO = Montana Operations Office

FILE REVIEW SUMMARY  
CLASS II ENHANCED RECOVERY WELLS

EPA Well Number: WYO 2141

OPERATOR SUBMITTED OPERATIONAL DATA:

Description of Injection Fluid: Produced Water Reporting Period: \_\_\_\_\_

Injection Rate: Maximum \_\_\_\_\_ BWPD; Surface Injection Pressure: Maximum \_\_\_\_\_ psi

EPA ESTABLISHED OPERATING LIMITS

Surface Injection Pressures: Maximum \_\_\_\_\_ psi FRACTURE GRADIENT FOR FIELD: \_\_\_\_\_ psi/ft

AQUIFER EXEMPTION

Ambient quality (TDS) of Formation Fluid: \_\_\_\_\_ mg/l Source: \_\_\_\_\_

Exemption Needed? Yes: \_\_\_\_\_ No: \_\_\_\_\_ Exemption Issued? Yes: \_\_\_\_\_ No: \_\_\_\_\_ Source: \_\_\_\_\_

INSPECTIONS

Inspection Date: 4/5/89 Routine: ☒ Compliance: \_\_\_\_\_ MIT: \_\_\_\_\_ P&A: \_\_\_\_\_ Other: \_\_\_\_\_

Photographs: Yes \_\_\_\_\_ No ☒

Inspection Date: \_\_\_\_\_ Routine: \_\_\_\_\_ Compliance: \_\_\_\_\_ MIT: \_\_\_\_\_ P&A: \_\_\_\_\_ Other: \_\_\_\_\_

Photographs: Yes \_\_\_\_\_ No \_\_\_\_\_

Inspection Date: \_\_\_\_\_ Routine: \_\_\_\_\_ Compliance: \_\_\_\_\_ MIT: \_\_\_\_\_ P&A: \_\_\_\_\_ Other: \_\_\_\_\_

Photographs: Yes \_\_\_\_\_ No \_\_\_\_\_

MECHANICAL INTEGRITY

Date of last MIT: \_\_\_\_\_ Test Method: \_\_\_\_\_ Source: \_\_\_\_\_

Pass: \_\_\_\_\_ Fail: \_\_\_\_\_ Source: \_\_\_\_\_



FILE REVIEW SUMMARY  
CLASS II ENHANCED RECOVERY WELLS

EPA Well Number: WYO

Cementing Records Reviews (40 CFR 144.28(e)) - Make copies of completion report, etc., to be kept as attachments to this review and/or enter needed data in space below. List any logs that have been run on the well. Use rectangular coordinate paper and draw schematic in support of the calculations made to check cementing adequacy. Show geologic stratigraphy on the left side and construction features on the right side. Show calculations and assumptions. Identify all additional pages by well number and date, and attach to this file review.

Cement behind the pipe is: Adequate: \_\_\_\_\_ Inadequate: \_\_\_\_\_ Insufficient Data: \_\_\_\_\_

TRANSFER OF OWNERSHIP

Transfer of Ownership from operator submitting original November 25, 1989 inventory information:

Y: \_\_\_\_\_ N: \_\_\_\_\_

If Yes: Previous Owner: \_\_\_\_\_

EPA notified of Transfer of Ownership? Yes: \_\_\_\_\_ By: \_\_\_\_\_

No: \_\_\_\_\_

Adequate Financial Demonstration Provided by new Owner/Operator? Yes: \_\_\_\_\_ No: \_\_\_\_\_

Previous Owners Financial Demonstration Released? Yes: \_\_\_\_\_ No: \_\_\_\_\_

Transfer of Ownership Completed? Yes: \_\_\_\_\_ No: \_\_\_\_\_



FILE REVIEW SUMMARY  
CLASS II ENHANCED RECOVERY WELLS

EPA Well Number: WY02141

SUMMARY OF NOVEMBER 25, 1989 OPERATOR SUBMITTAL

INVENTORY: Rec'd by Nov. 25, 1989: ☒ Yes ☐ No Adequate per 144.26: Yes: ☒ No: ☐

If "NO," authorization by rule automatically terminates by 144.26.

INJECTION FORMATION: Name: Tensleep Formation Fluid TDS \_\_\_\_\_ mg/l

If needed, has aquifer exemption been issued? Yes: ☐ No: ☐

If "NO," authorization by rule automatically terminates by 144.12.

PLUGGING & ABANDONMENT PLAN: Rec'd by Nov. 25, 1989: ☒ Yes ☐ No Date Rec'd 11/14/89

Adequate per 144.28(c) & 146.10 Yes: ☒ No: ☐

FINANCIAL RESPONSIBILITY: Rec'd by Nov. 25, 1989: ☒ Yes ☐ No Date Rec'd \_\_\_\_\_

Adequate per 144.28(d) Yes: ☒ No: ☐

MONITORING REPORT: Rec'd by Feb. 15, '90: ☒ Yes ☐ No Date Rec'd \_\_\_\_\_

Adequate per 144.28(g) Yes: ☒ No: ☐

SUBSEQUENT MONITORING REPORTS: Adequate per 144.28(h) Yes: ☐ No: ☐

Annual Report 1989: \_\_\_\_\_ Annual Report 1992: \_\_\_\_\_

Annual Report 1990: \_\_\_\_\_ Annual Report 1993: \_\_\_\_\_

Annual Report 1991: \_\_\_\_\_ Annual Report 1994: \_\_\_\_\_

Reviewed for compliance w/maximum allowable injection pressure and rate? Yes: ☐ No: ☐

SUBSEQUENT SUBMITTALS: Plugging & Abandonment Plan: Adequate per 144.28(c) & 146.10.

Date Received: \_\_\_\_\_ Yes: ☐ No: ☐

Financial Responsibility: Adequate per 144.28(d)

Date Received: \_\_\_\_\_ Yes: ☐ No: ☐

FILE REVIEW SUMMARY  
CLASS II ENHANCED RECOVERY WELLS

EPA Well Number: WYO

NON-COMPLIANCE SUMMARY:

Well Name: \_\_\_\_\_

Operator Name: Chevron U.S.A. Inc.

VIOLATIONS WHICH AUTOMATICALLY TERMINATE AUTHORIZATION BY RULE:

\_\_\_\_ Failure to submit inventory information 40 CFR 144.26; \_\_\_\_ Injection into a non-exemption USDW

VIOLATIONS WHICH SUBJECT OPERATOR TO COMPLIANCE/ENFORCEMENT ACTIONS:

- |  |  |
|--|--|
| ( ) <u>VI100 - MECHANICAL INTEGRITY</u><br>Fail MI test<br>Failure to test wells   | ( ) <u>VI150 - FINANCIAL RESPONSIBILITY</u><br>Inadequate financial demonstration<br>No Financial demonstration  |
| ( ) <u>VI105 - UNAUTHORIZED INJECTION</u><br>Failure to submit inventory<br>information<br>Injection into non-exempt USDW                            | ( ) <u>VI155 - FAILURE TO MAKE REQUIRED<br/>NOTIFICATION</u><br>30-day advance notification of MIT<br>Notice of abandonment<br>Change of Ownership   |
| ( ) <u>VI110 - 24 HR. REPORTING &amp;/OR WRITTEN<br/>FOLLOW UP</u><br>Failure to notify EPA of non-compliance  | ( ) <u>VI160 - FAILURE TO MONITOR</u>  |
| ( ) <u>VI115 - WELL CONSTRUCTION</u><br>Inadequate Cementing &/or Casing   | ( ) <u>VI160 - NO FLOW METER</u>   |
| ( ) <u>VI120 - OPERATING REQUIREMENTS</u>  | ( ) <u>VI170 - REPORT IS INCOMPLETE, MISSING,<br/>LATE OR INCORRECT</u><br>Signatory Authority<br>Failure to submit reports<br>Financial Reports<br>P&A Plan<br>Well Rework Records<br>Plugging Report |
| ( ) <u>VI520 - INJ. VIOLATION - PRESSURE OR INJ.<br/>BETWEEN CASING/WELL BORE</u>  |  |
| ( ) <u>VI125 - FAILURE TO PROPERLY P &amp; A</u><br>Inadequate P&A Plan<br>Failure to submit plugging report within<br>60 days of plugging           | ( ) <u>VI175 - INVENTORY REQUIREMENTS</u><br>Inadequate formation fracture data  |
| ( ) <u>VI525 - FAILURE TO NOTIFY OF WELL T.A'D<br/>MORE THAN 2 YEARS</u>   | ( ) <u>VI500 - INADEQUATE CORRECTIVE ACTION</u>  |
| ( ) <u>VI130 - FALSIFYING INFORMATION</u>  | ( ) <u>VI505 - INADEQUATE FORMATION TESTING<br/>REPORT</u>   |
| ( ) <u>VI140 - COMPLIANCE SCHEDULE</u><br>Failure to schedule activity as directed<br>by EPA<br>Failure to provide information as<br>directed by EPA |  |
| ( ) <u>VI540 - FAILURE TO APPLY FOR PERMIT</u><br>as directed by EPA   |  |
| ( ) <u>VI145 - RECORD RETENTION</u>  |  |

=====

VIOLATION FOLLOW-UP ASSIGNED TO: \_\_\_\_\_ Date: \_\_\_\_\_

FILE REVIEW SUMMARY  
CLASS II ENHANCED RECOVERY WELLS

EPA Well Number: WYO

FOLLOW-UP ACTIVITIES:

Compliance Initiated: Date: \_\_\_\_\_ By: \_\_\_\_\_

Permit Call-in: Date: \_\_\_\_\_ By: \_\_\_\_\_

Action: \_\_\_\_\_

Date: \_\_\_\_\_ By: \_\_\_\_\_

Action: \_\_\_\_\_

Date: \_\_\_\_\_ By: \_\_\_\_\_

Action: \_\_\_\_\_

Date: \_\_\_\_\_ By: \_\_\_\_\_

I certify that this rule authorized Class II injection well has been reviewed and that (check appropriate phrase):

\_\_\_\_\_ It is not endangering USDW's, and is in full compliance with UIC program requirements

\_\_\_\_\_ It is not endangering USDW's, but is not in full compliance with UIC program requirements. Therefore, appropriate enforcement/compliance action has been initiated.

\_\_\_\_\_ Rule authorization has **AUTOMATICALLY TERMINATED** and the operator can resume injection only if a permit is issued for this well.

\_\_\_\_\_ Rule authorization **SHOULD BE TERMINATED** for cause and the operator notified to either cease injection permanently or temporarily cease injection and apply for a permit for this well.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

MAXIMUM INJECTION PRESSURE - RULE-AUTHORIZED FILE REVIEW

Operator: Chevron

Field Name: Steamboat Butte

Well Name: E-30

Well Number: WYO 2141

The maximum injection pressure (MIP) has been established through the use of:

- ☐ Technical data provided by the operator or ☐ 40 CFR 147.1353 (b)  
☐ 40 CFR 147.1354 (a) (i) which directs EPA to establish MIP on field basis

40 CFR 147.1354 (a) (i)  
(MIP on field basis)

MIP for field \_\_\_\_\_ psi

40 CFR 147.1353 (b)

MIP = (0.733 - (0.433)Sg)d

Sg = specific gravity \_\_\_\_\_

d = depth to  
inj perfs \_\_\_\_\_

MIP = \_\_\_\_\_ psi

$$MIP = [Frac. Grad. - (.433)(Sg.)] d$$

FRACTURE DATA

- ☐ STEP RATE TEST dated \_\_\_\_\_, 19\_\_\_\_  
☐ ACID FRACTURE dated \_\_\_\_\_, 19\_\_\_\_  
☐ \_\_\_\_\_  
☐ \_\_\_\_\_

Breakdown Pressure \_\_\_\_\_ psi

ISIP \_\_\_\_\_ psi

Formation pressure \_\_\_\_\_ psi

Fracture gradient \_\_\_\_\_ psi

Proposed Maximum

Surface Inj Pressure \_\_\_\_\_ psi

Hydrostatic head<sub>i</sub> = (Sg)0.433 x d =  $P_h$  =

Sg = specific gravity \_\_\_\_\_

d = depth to inj perfs 6991'

$P_h$  = \_\_\_\_\_ psi

$$P_p = (Frac. Grad.) (depth) =$$

MIP at surface (assuming NO friction loss)  $P_p - P_h =$  \_\_\_\_\_ psi

MIP at perfs  $P_p =$  \_\_\_\_\_ psi



WYO 2141



# UIC WELL DATA SHEET

Facility Name: Steamboat Butte Waterflood

Field Name: Steamboat Butte Field

Ownership: Chevron U.S.A. Inc. - 100% WIO

Legal Contact: Chevron U.S.A. Inc.  
Attn: D. F. Forsgren, Environmental, Safety, Fire, & Health  
Coordinator  
Telephone: (303) 930-3000 or 930-3439  
P. O. Box 599  
Denver, CO 80201

Well Name: Tribal E-30 Operating Status: AC

Well Classification: 2R - Enhanced Recovery

Nature of Injected Fluids: Produced water from Tensleep, Phosphoria, Nugget,  
Curtiss, and/or Lakota Formation in either the Steamboat Butte or Pilot Butte  
Fields. Some make up water out of the Wind River TDS Avg. 3000 to 9000.

Location: 1600 ft. FNL 1600 ft. FEL Sec. 5 T 3N R 1W Fremont Cty, Wyo.  
SW Qtr. NE Qtr.

TD: 7300 ft. KB elev. 5691 ft. Date TD'd 3/1/84

## Current Data

Formation of Injection No. Tensleep Interval 6991 ft. to 7148 ft.

Tubing size & grade 2-7/8", 6.5#, C-75 Packer depth: 6885 ft. PBTD 7207 ft.

Injection Rates: 2850 BFPD Avg. 2950 BFPD Max.

Injection Pressures: 1650 psig Avg. 1700 psig Max.

Last Mechanical Integrity Test Date: 3/24/89

## Historical Data

Hole Size, Casing and Cementing Records:

Surface String: Hole Size: 12-1/4"

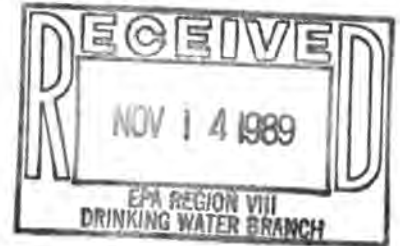
Casing: 9-5/8", 40#, set @ 1024'

Cement: 400 sx

WY02141

## UIC WELL DATA SHEET

PAGE 2

Well Name: Tribal E-30

Intermediate String: Hole Size: \_\_\_\_\_

Casing: \_\_\_\_\_

Cement: \_\_\_\_\_

Production String: Hole Size: 8-1/2"Casing: 5-1/2", 17#, set @ 7296'Cement: 590 sx Class H w/16% gel & 3% salt lead  
700 sx Class H w/3% RCL tail

## Completion Record

Date: \_\_\_\_\_ Remarks: \_\_\_\_\_

3/84 Complete as injection well by perf'g Tensleep at 6991-7016', 7036-7052',  
7110-7120', 7138-7148', at 4 SPF, acidized w/6000 gals 15% HCl PWOI on  
8/14/848/84 Inject 2445 lbs of polymer to correct injection profile, injection  
started 8/29/84 to 9/6/84. PWOIPrepared By: K. Shaughnessy Title: Technical Assist. Date: 11/06/89Reviewed By: *[Signature]* Title: Sr. PE Date: 11/8/89

U.S. ENVIRONMENTAL PROTECTION AGENCY  
OFFICE OF DRINKING WATER  
**INVENTORY OF INJECTION WELLS**  
(This information is collected under  
the authority of the Safe Drinking Water Act.)I. DATE PREPARED  
(mo., day, & year)

11 09 89

II. FACILITY I.D. NUMBER

III. TRANSACTION TYPE ('X' one)

- ☐ 1. DELETION  
☒ 2. FIRST TIME ENTRY  
☐ 3. CHANGE OF ENTRY

## IV. FACILITY NAME AND LOCATION

C										A. NAME																		
01	S	T	E	A	M	B	O	A	T	B	U	T	T	E	F	I	E	L	D	W	A	T	E	R	F	L	O	O
C										B. STREET ADDRESS OR ROUTE NUMBER																		
02																												
C										C. CITY OR TOWN					D. ST.		E. ZIP CODE		F. COUNTY		G. INDIAN LAND (mark 'X')							
03	F	R	E	M	O	N	T	C	O	U	N	T	Y	W	Y												X	

## V. LEGAL CONTACT: TYPE, NAME, PHONE, MAILING ADDRESS, AND OWNERSHIP

C										A. TYPE (mark 'X')										B. NAME (last, first, & middle initial)										C. PHONE (area code & no.)										
04											<input checked="" type="checkbox"/> 1. OWNER <input checked="" type="checkbox"/> 2. OPERATOR										D F F O R S G R E N										3 0 3 9 3 0 3 0 0 0									
C										D. ORGANIZATION																														
05	C	H	E	V	R	O	N	U	S	A	I	N	C																											
C										E. STREET OR P.O. BOX																														
06	P	O	B	O	X	5	9	9																																
C										F. CITY OR TOWN					G. ST.		H. ZIP CODE		I. OWNERSHIP ('X' one)																					
07	D	E	N	V	E	R						C	O	8	0	2	0	1	<input type="checkbox"/> P. PRIVATE <input type="checkbox"/> M. PUBLIC <input checked="" type="checkbox"/> O. OTHER (specify) <input type="checkbox"/> S. STATE <input type="checkbox"/> F. FEDERAL    Indian																					

## VI. WELL INFORMATION

WELL OPERATION STATUS: UC = UNDER CONSTRUCTION    AC = ACTIVE    TA = TEMPORARILY ABANDONED  
 PA = PERMANENTLY ABANDONED AND APPROVED BY STATE    AN = PERMANENTLY ABANDONED AND NOT APPROVED BY STATE

C	A. CLASS AND TYPE	B. TOTAL NO. OF WELLS	C. WELL OPERATION STATUS					D. COMMENTS (optional)
			UC	AC	TA	PA	AN	
08								See the attached UIC Well Data Sheets
09								
10								
11								
12								
13								
14								



W02141

Section I. Enter date in order of month, day, and year.

Section II. In the first two positions, insert the appropriate U.S. Postal Services State Code. In the remaining positions, insert the appropriate DUNS, GSA, or State Facility Number, preceded by a one position alphabetic identifier:

D - DUNS Number  
G - GSA Number  
S - State Facility Number

Example: A Federal facility (GSA - 123456789) located in Virginia would be entered as: VAG123456789.

Section III. Transaction type.

Deletion: Place an 'X' in this box and enter the Facility ID Number.

First time entry: Place an 'X' in this box and fill in all appropriate information.

Change of entry: Place an 'X' in this box, enter the Facility ID Number, and fill in the information to be changed.

Section IV. Facility Name and Location

Item A: Insert the official or legal name of the facility.

Item B, C, D, and E: Self-Explanatory.

Item F: Insert the numeric county code acquired from the Federal Information Processing Standards Publication (FIPS Pub 6-1) June 15, 1970, prepared by the U.S. Department of Commerce, National Bureau of Standards. For Alaska, use the Census Division Code developed by the U.S. Census Bureau.

Item G: Place an 'X' in the box if the facility is located on an Indian reservation.

Section V. Legal Contact.

Item A: Place an 'X' in the appropriate box to indicate the type of legal contract. For wells operated by a lease, the operator is the legal contact.

Items B, C: Self-Explanatory.

Item D: If the legal contact is an individual, give the name of his/her business organization to expedite mail distribution.

Item E, F, G, and H: Self-Explanatory.

Item I: Place an 'X' in the appropriate box to indicate the type of ownership.

Section VI. Well Information.

Item A: Enter in these two positions the class and type of injection wells to be inventoried at this facility. Use the most pertinent code selected from the list below. For example: 2R for enhanced recovery injection wells and 3M for solution mining wells, etc.

Item B: Enter the total number of injection wells for each specified class/type.

Item C: Insert the number of wells for each class/type under each operation status.

#### CLASSIFICATIONS AND TYPES OF INJECTION WELLS

WELL CODE CLASS/TYPE	PRIMARY FUNCTION OF INJECTION WELLS	WELL CODE CLASS/TYPE	PRIMARY FUNCTION OF INJECTION WELLS	WELL CODE CLASS/TYPE	PRIMARY FUNCTION OF INJECTION WELLS
Class I	Industrial, Municipal, and Nuclear Storage Wells That Inject Below Deepest Under-Ground Source of Drinking Water.	2X	Other Class II wells	Class V	All Other Wells That Inject into or above an Underground Source of Drinking Water
1I	Industrial disposal well	Class III	Special Process Injection Wells	5A	Air conditioning/cooling water return well
1M	Municipal disposal well	3G	In situ gassification wells	5B	Salinity barrier well
1N	Nuclear waste disposal or storage well	3M	Solution mining well	5D	Storm water drainage well
1X	Other Class I wells	3S	Sulfur mining well by Frasch process	5F	Agricultural drainage well
Class II	Oil and Gas Production and Storage Related Injection Wells	3T	Geothermal well	5G	Other drainage wells
2A	Annular injection well	3U	Uranium mining well	5R	Recharge well
2D	Produced fluid disposal well	3X	Other Class III wells	5S	Subsidence control well
2H	Hydrocarbon storage well	Class IV	Hazardous Facility Wells That Inject into or above an Under-ground Source of Drinking Water	5W	Waste disposal well
2R	Enhanced recovery injection well.	4H	Hazardous facility injection well	5X	Other Class V wells